Measuring Profitability Efficiency of the Saudi National Banks

Dr. Ahmed Arif Almazari
Associate Professor
King Saud University
Saudi Arabia

Dr. Mohammad Abdelkarim Almumani
Assistant Professor
King Saud University
Saudi Arabia

Abstract

This study attempted basically to measure the profitability efficiency of the Saudi national banks for the period 2006-2010. It is evaluatory in nature, drawing sources of information from secondary data. The profitability efficiency of banks is studied on the basis of financial variables and ratios. Multiple Regression was used to test the effect of independent variables on ROA and operating income (OI), it was found independent variables affect ROA and it does not affect operating income (OI). It was also found that banks with higher total assets does not always mean that it has better profitability efficiency. It is recommended that this study can be a source of help to bank managers to improve their profitability performance and formulate policies that will promote effective financial system. The Saudi national banks can perform better as they exist in a very save, sound and stable economic environment.

Keywords: Profitability Efficiency, Return on Assets (ROA), Operating Income (OI), Asset Management(AM), and Operational Efficiency(OE).

1. Introduction

Banks, as the critical part of financial system, play an important role in contributing to a country's economic development. If the banking industry does not perform well, the effect to the economy could be huge and broad. Efficient banking system reflects a sound intermediation process and hence the banks' due contribution to economic growth. If commercial banks are functioning efficiently, monetary policies are likely to be effective.
Profitability efficiency analysis is essential for the evaluation of banks' performance. To estimate banks' efficiency, we can apply different methods. Analysis of financial indicators is the most popular efficiency analysis method in banks, but the number of financial indicators can be really big and make the interpretation of the results more difficult.

Despite the importance of financial performance studies, the literature on profitability efficiency of Saudi banking is not existing. So a great work is needed on measuring and comparing the financial performance of Saudi banks. In view of the above, a study of measuring profitability efficiency on the Saudi national banks is useful to various interest groups such as the Government, Central Bank of Saudi Arabia, Academicians, and the community. Hence, the present study proposes to address this important issue on Saudi national banks.

This paper is organized to study the linkage between profitability efficiency measured by return on assets (ROA) and operating income-bank size as dependent variable and bank assets-size, asset management (Utility), operational efficiency as independent variable .The main purpose of this study is to assess the financial data of the five Saudi national banks for the financial periods (2006-2010). In addition, the selected banks will be analyzed quantitatively to find the differences among these banks and they will be ranked based on their financial efficiency. The importance of this study stems from the importance of the Saudi National Banks in the country economy. The findings of this study can be added to the existing literature. In addition, this study is anticipated to make contributions in two folds: first, contributions to the management as decision makers in the field of banking; secondly, contributions to the academic field.

The expected contributions of this study to the management in the field of banking can be said to be that: this study may help decision makers to pay more attention on the major banking activities that may help in increasing the profitability efficiency positions and ranking of the bank as compared to other banks. In addition, the financial information of this study will help the management of the Saudi National banks in setting up plans and financial strategies. The expected contributions of this study to the academic fields can be said to be that: from an academic point of view, this research provides a new perspective in evaluating the profitability efficiency of Saudi National banks as well as the finding of this study can be added to the present literature and it can help researchers in their future studies.

Furthermore, this study attempts basically to measure the profitability efficiency of the Saudi national banks. Banks are classified according to their financial characteristics and financial indicators which will be presented from the banks financial statements. The other objectives will attempt to study the impact of independent variable on dependent variable based on certain financial indicators.

It is hypothesized in this study that, there is a positive correlation relationships between the profitability efficiency measured by (ROA, and operating income as size), and the (operational efficiency, asset management, total assets as bank size). Moreover, there exist an impact of operational efficiency, asset management, and total assets-bank size on profitability efficiency of the selected banks. This study is organized as follows: Section one introduces the importance of banks profitability efficiency. Section two discusses the relevant literature review. Section three gives a brief overview on the Kingdom of Saudi Arabia banking system. Section four introduces the methodology. Section five reports the results and analysis. Section six testing the hypothesis of study. The paper's conclusions are summarized in section seven.

2. Review of Literature

Al-Faraj et al. (2006) investigated the performance of the Saudi commercial banking industry using DEA to evaluate the technical efficiency of Saudi banks for the year 2002 and compared with world mean efficiency scores. Their study revealed that the mean efficiency score of Saudi commercial banks compares very well with the world mean efficiency scores. They recommends that Saudi banks should continue their efforts of adapting new technologies and providing more services in order to sustain competitive advantages as Saudi Arabia continues to deregulate the banking industry.

Ariff and Can (2008) analyzed both cost and profit efficiency of Chinese commercial banks together with the influence of ownership type, size, risk profile, profitability and other key environmental variables on bank efficiency. Using data from 28 commercial banks in China from 1995 to 2004 and employing the DEA techniques, they suggested that Chinese banks were relatively cost-efficient than profit-efficient. Majid, Zulkhibri and Fadzlan (2008) studied the relationship between the efficiency level of China's banking sector and share price performance from 1997 to 2006. The results suggest that ownership structures contributed to the different levels of technical and scale efficiency of commercial banks in China. Besides that, the bank efficiency level depended on bank management quality, size, and bank's diversification towards non-interest income.

Halkos and Salamouris (2004) concluded, from their study on Greek banks, that the larger the total assets, the higher the efficiency. Furthermore, a positive relationship between size and efficiency is observed for the European banking industry (Bikker, 1999; Papadopoulos, 2004).

Moreover, using the data envelopment approach (DEA) Berg et al. (1993) studied bank efficiency in Norway, Sweden, and Finland. Their results show that the largest Swedish banks were the most efficient, and, hence, they concluded that they are in the best position to expand in a future common Nordic banking market.

Akhavein et al. (1997) reveals that there is a positive and significant relationship between size and bank profitability. Boyd and Runkle (1993) found that the large size of the institution may result in economies of scale which in turns may reduce the costs of gathering and processing information. Berger (1987), Miller and Noulas (1997), and Anthanasoglou et. al. (2008) showed that few cost savings can be achieved by increasing the size of banking firm. Athanasoglou et. al. (2006) and Amel et al. (2004) suggested that the effects of the bank size on profitability may be positive up to a certain limit and beyond that point it could be negative due to various factors such as the sample country selected and period of study. Therefore, the relationship between the bank size and its profitability is expected to be uncertain due to the difference in various factors.

Other studies found no conclusive relationship between efficiency and size in the banking industry. Girardone (2004), in his study of Italian banks, did not determine that there was any conclusive relationship between the size and efficiency of the banks. In a study conducted by Isik and Hassan (2002), size is not found to be strongly related to technical efficiency. In the case of Japanese banks, Drake et al. (2003) indicated that technical efficiency declines as bank size decreases from the middle-ranking bank size.

As far as the profitability and efficiency of Greek banks are concerned, Noulas (1999) examined the ROE (Return on equity), ROA (Return on assets) ratios, the ratios of leverage and operating efficiency in 19 Greek banks for the period 1993- 1998. According to the results there are no significant differences in the return of equity and asset diachronically. Bank profitability showed no improvement in 1998 as compared to 1993 or 1994. The profitability of banks during the last two years (1997-1998) seemed to increase, though, when compared to that of 1996. The latter year is representative, as few banks and especially the state-controlled ones, in their effort to improve their portfolios and to show reduced accounting profitability, have kept large amounts in the provisions account.

Staikouras and Steliaros (1999) examined the attributive profitability factors of 17 commercial Greek banks for the years 1991-1998. They used ROE and ROA ratios in relation to endogenous and exogenous variables. According to the results, the profitability of Greek banks is defined by the inflation rate, the proprietary regime, the ratio of reserve funds for borrowings to the total of granted debts and the ratio of debts to the total assets.
Bassett and Brady's (2002) study found that small banks grew more rapidly than large banks from 1985-2001 with profitability remained at a high level. While interest costs increased, this was more than offset by higher returns on earning assets.

3. Overview on the Kingdom of Saudi Arabia Banking System

Saudi Arabia is one of the world's fastest growing banking markets. National banks that are operating in the country face competitive environment but these banks are expected to be more efficient in near future in the region amid technological developments and government favorable policies. Even in the mid of global financial crisis, Saudi Arabian banking industry registered impressive positive growth results.

Despite the world adverse economic conditions, Saudi Arabia banks continued to expand their lending activities. The Saudi banks continued to lend to the enterprises as well as households. Total credit extended (to households and non-financial organizations) by the Kingdom's banks is increased. The private sector dominates the Kingdom's banking sector and accounts for the bulk of credit extended as well as deposits received.

According to the Saudi Central Bank, bank lending in Saudi reached a total SR891.6 bn as of end-November 2011, up 15% on the year-earlier . This positive momentum was generated largely by a rise in credit to the private sector, where loans extended hit SR859.4bn in November 2011 alone, up 15% year-on-year. 2011, The total assets of Saudi banking growth rate reached to 13.6% during 2007-10, while loans growth rate increased to 12.2% during 2007-2010. Global Research expects Saudi banks to post assets & loan growth of 9.1% & 11.9% respectively, in 2011. Saudi Arabia's robust banking system maintains: i) Conservative loan to deposit limit of 85%, ii) NPL coverage of more than 100%, iii) Net Interest Margin (2006-10) at 3.5% or above, iv) Capital adequacy ratio above 11%, and v) Equity to assets ratio at around 15%

Furthermore, Saudi Arabia's banking system is among the safest in the world, according to new global assessment published by Standard & Poor's. The ratings agency gave the Gulf kingdom a Banking Industry Country Risk Assessment (BICRA) rating of 2, upgraded from 3, making it the most low-risk banking sector in the Middle East. Globally, only Canada and Switzerland were ranked higher with a Group 1 rating while Saudi Arabia were in the same group as countries such as Germany, France, Hong Kong, Singapore, Norway and Finland. Both the US and the UK were ranked in Group 3.

4. Methodology

As commercial banks play an important role in the financial sector, this paper focuses specifically on the banking sector as a vital segment of the whole economy. In order to accomplish the main objectives of this study, the data was gathered from secondary sources-the bank's financial statements from (2006-2010). These data were used to compute key financial ratios of the selected Saudi banks for the mentioned period, as well as to assess the performance of these banks.

In addition, data was gathered from Books, papers, articles, Specialized International Journals, the World Wide Web (Internet), and relevant previous studies. This study uses a descriptive financial analysis to describe, measure, compare, and classify the financial situations of the selected banks.

Only national banks of Saudi Arabia were selected as a sample of study, which it accounts for 20% of the study population (number of national banks operating in Saudi Arabia were 5 banks in 2010), foreign, joint venture, Islamic and other financial institutions were excluded from the study. The number of the selected banks should not be considered as a shortcoming of the study since its title focused on just Saudi national banks. However, the dependent variable of this study will be profitability efficiency which will be measured by return on assets (ROA) and the operating income as size. The independent variables of this study are the following:

- The Bank Size will be measured by the total assets of the bank.
- Asset Management will be measured by asset utilization ratio (operational income divided by total assets)
- Operational Efficiency will be measured by the operating efficiency ratio (total operating expenses divided by net operating income).

For the purpose of analysis, this study uses the major banking activities and is comprised of total assets, net income, operating income, operating expenses, operational efficiency, asset management, return on assets. Also, this study tries to explore any kind of variance according to its different variables. Therefore, correlations, ratio analysis, and simple regression were applied to examine and compare the impact of independent variables on the dependent variable. Analysis of variance (ANOVA) was used in testing the hypotheses and to measure the differences and similarities between the sample banks according to their different characteristics. Pearson correlation coefficient also used to investigate the correlation between the paper variables at 5% level of confidence according to the SPSS software package.

5. Results and Analysis

Comparisons of the bank's assets, net income, operating income, operating expenses, OE, AM and ROA.
Table (1) illustrates the total assets for each of the Saudi national banks from the period 2006-2010, and provides the growth rate of assets considering 2006 as base year and the average of total assets. It is clear from the following table that, RB bank got the lowest growth rate in its total assets (-80.5 %). On the other hand, BJ bank gained the highest growth rate in its assets (110 %). Moreover, to rank the banks based on their average of total assets, RB is considered to be in the first position, followed by NCB, ANB, SIB and BJ respectively. The combined growth rate of total assets of these banks decreased by -46.6% in 2010.

As mentioned in table (2), the growth rate of net income of all the Saudi National Banks were negative. RB bank registered low negative growth rate in total net income (-2.9%) in year 2010 as against 2006. BJ has registered the lowest growth rate among all banks of (-96.9 %). Furthermore, the NCB bank is ranked in the first position among the listed banks based on their average of total net income and BJ bank is ranked last. The combined growth rate of total net income of these banks decreased by -36% in 2010.

The growth rate of total operating income as appeared in table (3) was very high for all the banks under study as compared to the base year except for BJ bank. The NCB bank gained the highest growth rate in its total operating income which reached to (125.6%) in year 2010 comparing with its operating income in year 2006. A low growth rate of (10.6 %) has been registered for BJ bank. Furthermore, the NCB bank is ranked in the first position among the listed banks based on their average of total operating income and BJ is the last one. The combined growth rate of total operating income of these banks increased by 104.2 % in 2010.

Total operating expenses growth rate as illustrated in table(4) was very high for (SIB) and (NCB) banks as compared to the base year which reached to 155.3% and 117.9% respectively. BJ bank has obtained the lowest growth rate reached to -60.5.In addition to that, (NCB) bank is ranked in the first position among all the listed banks based on their average of total operating expenses and BJ bank ranked in the last position. The combined growth rate of total operating expenses of these banks increased by 87.8 % in 2010.

The return on assets (ROA) is financial ratio used to measure the relationship of profits or earnings and total assets. (ROA) measure assesses the profitability performance of total assets, and could be treated as measure of financial performance in this study.

As it is known, this measure contains two elements, efficiency (total assets turnover), and effectiveness (profit margin). As mentioned earlier, ROA reflects the bank management ability to generate profits by using the available financial and real assets.

As shown in table (5), the summary of (ROA) ratios during the period of 2006-2010 for each Saudi National Bank is presented. In order to rank the banks based on their average ratios, BJ bank occupied the first position, it has an average of ROA 3.5%. The second position is for ANB bank with ROA average equals to 2.3%, and the last position is belonged to RB bank with average 1.6%.

The operational efficiency ratio in table (6) is financial ratio used to measure the relationship of operating expenses to operating income. It is a measure assesses the profitability performance and could be treated as measure of profitability efficiency in this study. In order to rank the banks based on their average ratios, SIB bank has obtained the first position, it has an average of 59%. The last position is for ANB bank which registered 44%. The asset management-utility ratio as appeared in table (7) is financial ratio used to measure the relationship of operational income to total assets. It is used as a measure of profitability efficiency in this study.

In order to rank the banks based on their average ratios, BJ bank has gained the first position, it has an average of 6.45%. The RB bank occupied the last position with an average of 3%.

It is very healthy to classify the banks based on their rank of activities and Profitability ratios, table (8) contains ranks of the positions for these banks. As it is shown in this table, RB bank gained the first rank position in total assets. Furthermore, it is in the last position among other banks in asset management and (ROA) ratios. Contrary to RB bank, BJ bank got the fifth or last position in total assets, net income, operating income, and operating expenses, meanwhile it obtained the first position in asset management and (ROA).The ANB Bank gained the second position in ROA and last position in operational efficiency. The SIB obtained the first position in operational efficiency and fourth position in other financial indicators. The NCB bank gained the first position in net income, operating income and operating expenses and third position in ROA.

6. Hypothesis Testing

This study proposes two hypotheses: the first one stated that there is a positive correlation relationships among the profitability efficiency measured by ROA, and operating income income-size, and the independent variables (operational efficiency, asset management, bank size-assets). The second hypothesis was stated as " there exist an impact of operational efficiency, asset management, and bank size-assets on profitability efficiency of the Saudi national banks . Correlations and analysis of variance were used to test the hypotheses of the study.

Statistical analysis was applied to test the above hypothesis and it was found that, there was an impact correlation relationships between the profitability efficiency measured by ROA, and operating income-size as dependent variable, and the independent variables (operational efficiency, asset management-utility, bank size-assets).
The results of correlations indicate that there is a high negative correlation relationship between ROA and operating efficiency, Pearson Correlation is equal to -0.572 at significant level 0.003 which indicate that there is an impact of operating efficiency as independent variable on ROA as dependent variable (see appendix). It is also clear from Pearson Correlation test that there is a highly positive correlation relationship between utility (asset management) as independent variable and ROA as dependent variable. Pearson correlation is equal to 0.949 at significant level 0.000 which is less than 0.05 which indicate that there is affect of utility (asset management) on ROA. As well as there exist a negative correlation relationship between total assets-size as independent variable and ROA as dependent variable. Pearson correlation is equal to -0.237 at significant level 0.254 which is greater than 0.05, therefore, there is no effect of total assets-size on ROA.

It was found from the test of correlation that there is no significant effect between operational efficiency, utility management (asset management) and total assets-size as independent variable on operating income-size as dependent variable. Pearson correlation equal 0.023, 0.011 and 0.347 at significant level to 0.912, 0.960 and 0.089 respectively which is greater than 0.05.Therefore, there is no significant effect between Independent variables and operating income. It was also found by testing the second hypothesis using the statistical analysis of variance (ANOVA) that "there exist an impact of operational efficiency, asset management, and total assets-bank size on profitability efficiency of the Saudi National Banks. The testing rule is to accept the hypothesis if the calculated F.Sig less than 0.05.

It is clear from the attached tables in the appendix that values of F.Sig are 0.000 and 0.297 which is less than 0.05 level for ROA and greater than 0.05 for operating income. Therefore, the second hypothesis was accepted for ROA and rejected for operating income (OI).

Multiple Regression was used to test the effect of independent variables on ROA and it was found that F value = 90.374 is significant at 0.05 level which means that independent variables affect ROA with high peasron correlation = 0.963

Multiple Regression was used to test the effect of independent variables on operating income (OI) and it was found that F value = 1.312 is not significant at 0.05 level which means that independent variables does not affect operating income (OI) with pearson correlation = 0.397.

7. Conclusion

Saudi Arabia is one of the world's fastest growing banking markets. National banks are operating in the competitive environment which will be more efficient in near future. Banks, as the critical part of financial system, play an important role in contributing to a country's economic development**.** , this paper focuses specifically on the banking sector as a vital segment of the whole economy.

Based on ranking report, this study arrived at the following fact that, banks with higher total assets does not always mean that it gain better profitable performance.

The present study examined predictors to find out it is impact on the profitability efficiency of the Saudi national banks. The regression analysis results indicate that there exist a significant impact of operational efficiency, asset management, and total assets bank size on profitability efficiency represented by ROA. This result is confirmed with the correlation analysis between variables of the study which indicated that there is affect correlation relationships among the variables.

Furthermore, Multiple Regression was used to test the effect of independent variables on operating income (OI) and it was found that independent variables do not affect profitability efficiency represented by operating income (OI).

This study can be a source of help to bank managers to improve their financial performance and formulate policies that will promote effective financial system. The study also recommend measures that could be adopted by banks to ensure soundness in their operations. Saudi national banks can perform better as they exist in a very save, sound and stable economic environment.

8. References

Akhavein, J.D., Berger, A. & Humphrey, D.B (1997). The effects of megamergers on efficiency and prices: Evidence from a bank profit function, Finance and Economic Discussion Series 1997-9, Board of Governors of the Federal Reserve System (U.S).

Al-Faraj, T., Bu-Bshait, K. & Al-Muhammad, W. (2006). Evaluating the efficiency of Saudi commercial banks using data envelopment analysis. International Journal of Financial Services Management, 1(4), 466-477.

Amel, D. Barnes, C. Panetta, F. & Salleo, C (2004). Consolidation and efficiency in the financial sector: a review of the international evidence', Journal of Banking and Finance, vol. 28, no. 10, pp. 2493-2519.

Ariff, M. & Can, L (2008). "Cost and Profit Efficiency of Chinese Banks: A Nonparametric Analysis", China Economic Review, Vol. 19, pp. 260-273.

Athanasoglou, P.P., Brissimis, S.N., & Delis, M.D. (2008). 'Bank-specific, industry specific and macroeconomic determinants of bank profitability', Journal of International Financial Markets, Institutions and Money, vol. 18, no. 2,pp. 121-136.

Athanasoglou, P.P., Delis, M.D., & Staikouras, C.K. (2006). The Determinants of Bank profitability in the South Eastern European Region, MRPA Paper No. 10274.

Bassett, W. F., & Brady, T. F. (2002). "What Drives Persistent Competitiveness of Small Banks?" Working Paper, Board of Governors of the Federal Reserve System,2002-28, 1-43.

Bassett, W. F., & Brady, T. F. (2002), "What Drives Persistent Competitiveness of Small Banks?" Working Paper, Board of Governors of the Federal Reserve System,2002-28, 1-43.

Berger, A., Hanweck, G.A & Humphrey, D.B. (1987).'Competitive viability in banking: Scale, scope and product mix economies', Journal of Monetary Economics, vol. 20, no. 3, pp. 501- 520.

Bikker, J. A.(1999). "Efficiency in the European Banking Industry: An explanation analysis to rank countries," Research Series Supervision No. 18, De Nederlandsche Bank.

Boyd, J.H., & Runkle, D.E. (1993) 'Size and performance of banking firms: Testing the predictions of theory', Journal of Monetary Economics, vol. 31, no. 1, pp. 47-67.

Drake, L., & Hall, M.J.B. (2003), " Efficiency in Japan banking: An empirical analysis," Journal of Banking and Finance, 27, pp. 891-917.

Girardone, C., Molyneux, P.& Gardener, E. P.M., (2004)," Analyzing the determinants of bank efficiency: The case of Indian banks," Applied Economics, 36:3, pp. 215-227.

Halkos, G.E., & Salamouris, D.S. (2004), "Efficiency measurement of the Greek commercial banks with the use of financial ratios: A data envelopment analysis approach," Management Accounting Research, 15:1, pp. 201-224.

Isik, I., & Hassan, K. (2002)," Governance, corporate control and efficiency of the Turkish Banking Industry, " paper presented at ERF Eight Annual Conference, Cairo, Egypt.

Kosmidou, K., Pasiouras, F., & Tsaklagkanos, A. (2005) "Factors influencing the profits and sizeof Greek banks operating abroad: a pooled time-series study", Applied Financial Economics, 15, 731-738.

Majid, A., Zulkhibri, M.,& Fadzlan.,S. (2008), "Bank Efficiency and Share Prices in China: Empirical Evidence from a Three-Stage Banking Model", MPRA Working Paper No. 12120

Miller, S. & Noulas, A. (1997)'Portfolio mix and large-bank profitability in the USA', Applied Economics 29, pp. 505-512.

Noulas, A. (1999). "Profitability and Efficiency of the Greek Banks (1993-1998)", Journal of the Banking Association of Greece, 19/20, 53-60.

Papadopoulos, S. (2004). " Market structure, performance and efficiency in European banking," International Journal of Commerce & Management, 14, 1, pp. 79-92.

Paul, S. & Kourouche, K. (2008). Regulatory policy and the efficiency of the banking sector in Australia. Australian economic review 41 (3):260-271.

Staikouras, C., & Steliaros, M., (1999) "Determinants Factors of Portability of the Greek Banking System", Journal of the Banking Association of Greece, 19/20, 61-66.

Table 1. Total Assets of Saudi National Banks (2006-2010) (SAR,000)

Name of Bank / Year	2006	2007	2008	2009	2010	Growth Rate	Average
The National Commercial Bank**(NCB)**	155706160	208717150	221801975	257452175	282371992	81 %	225209890
The Saudi Investment Bank**(SIB)**	40844623	46541793	53596364	50148011	51491233	26	48524405
Arab National Bank**(ANB)**	78035383	94467561	121307142	110297320	116034765	48.7	104028434
Bank Aljazira**(BJ)**	15712874	21563988	27519705	29976604	33018221	110	25558278
Riyad Bank**(RB)**	940154845	121350825	159652525	176399258	173556430	-81.5	314222777
Total	1230453885	492643324	583879719	624275377	656472641	-46.6	

Source: Collected and computed from the balance sheets of the Saudi National Banks 2006-2010

Table 2. Total Net Income of Saudi National Banks (2006-2010) (SAR,000)

Name of Bank / Year	2006	2007	2008	2009	2010	Growth Rate	Average
The National Commercial Bank	6273191	6016254	2031299	4121359	4803404	-23.4 %	4649101
The Saudi Investment Bank	2006258	822185	513229	521626	429335	-78.6	858527
Arab National Bank	2504725	2461202	2486124	2370012	1911089	-23.7	2346630
Bank Aljazira	1973951	805203	222339	12407	61940	-96.9	615168
Riyadh Bank	2908554	3011246	2638757	3030485	2824627	-2.9	2882734
Total	15666679	13116090	7891748	10055889	10030395	-36	

Source: Collected and computed from the income statements of the Saudi National Banks 2006-2010

Table3. Total Operating Income of Saudi National Banks (2006-2010) (SAR,000)

Name of bank / Year	2006	2007	2008	2009	2010	Growth Rate	Average
The National Commercial Bank	9291652	9882181	10502608	11478644	11667256	125.6	10564468
The Saudi Investment Bank	2556266	1635345	1938087	1517158	1749258	68.4	1879223
Arab National Bank	3855372	3956259	4135183	4493459	4503781	116.8	4188811
Bank Aljazira	2615396	1446792	1136544	1171036	276261	10.6	1329206
Riyad Bank	4886136	5181023	5248362	5960109	5980452	122.4	5451216
Total	23204822	22101600	22960784	24620406	24177008	104.2	

Source: Collected and computed from the income statements of the Saudi National Banks 2006-2010

Table 4.Total Operating Expenses of the Saudi National Banks (2006-2010) (SAR,000)

Name of bank / Year	2006	2007	2008	2009	2010	Growth Rate	Average
The National Commercial Bank	3043936	3834547	8416531	7098835	6633499	117.9	5805469.6
The Saudi Investment Bank	550008	813160	1408071	1093976	1404277	155.3	1053898.4
Arab National Bank	1350647	1495057	1642107	2128048	2608879	93.16	1844947.6
Bank Aljazira	543101	644626	914739	292690	214321	-60.5	521895.4
Riyad Bank	1977585	2169777	2609605	2929624	3155825	59.6	2568483.2
Total	7465277	8957167	14991053	13543173	14016801	87.8	

Source: Collected and computed from the income statements of the Saudi National Banks 2006-2010

Table5. Return on Assets (ROA) of Saudi National Banks (%)

Name of Bank / Year	2006	2007	2008	2009	2010	Average
The National Commercial Bank	4.0	2.9	0.9	1.6	1.7	2.2
The Saudi Investment Bank	4.9	1.8	1.0	1.0	0.8	1.9
Arab National Bank	3.2	2.6	2.0	2.1	1.6	2.3
Bank Aljazira	12.6	3.7	0.8	0.00	0. 2	3.5
Riyadh Bank	0.3	2.5	1.7	1.7	1.6	1.6
Total	25	13.5	6.4	6.4	5.7	

Source: Computed from the financial statements of the Saudi National Banks 2006-2010

Table6.Oprational Efficiency Ratios of the Saudi National Banks (2006-2010) (%)

Name of bank / Year	2006	2007	2008	2009	2010	Average
The National Commercial Bank	33	39	80	62	57	54
The Saudi Investment Bank	22	50	73	72	80	59
Arab National Bank	35	38	40	47	58	44
Bank Aljazira	21	45	80	25	78	50
Riyad Bank	40	42	50	49	53	47
Total	32	41	65	55	58	

Source: Computed from the financial statements of the Saudi National Banks 2006-2010

Table7.Asset Management Ratios of the Saudi National Banks (2006-2010)

Name of bank / Year	2006	2007	2008	2009	2010	Average
The National Commercial Bank	5.97	4.73	4.73	4.46	4.13	4.80
The Saudi Investment Bank	6.26	3.51	3.62	3.03	3.40	3.96
Arab National Bank	4.94	4.19	3.41	4.07	3.88	4.1
Bank Aljazira	16.64	6.71	4.13	3.91	0.84	6.45
Riyad Bank	0.52	4.27	3.29	3.38	3.45	3.00
Total	6.87	4.68	3.84	3.77	3.14	

Source: Computed from the financial statements of the Saudi National Banks 2006-2010

Table8. Ranks of the Saudi National Banks Based on Financial Indicators

Banks/ Indicators	NCB	SIB	ANB	BJ	RB
Total assets	2	4	3	5	1
Net Income	1	4	3	5	2
Operating Income	1	4	3	5	2
Operating Expenses	1	4	3	5	2
Operational Efficiency (OE)	2	1	5	3	4
Asset Management (AM)	2	4	3	1	5
Return on Assets (ROA)	3	4	2	1	5

Appendix

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963[a]	.928	.918	.70567

a. Predictors: (Constant), OE, Utility assets, Total assets [a]

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	135.009	3	45.003	90.374	.000[a]
	Residual	10.457	21	.498		
	Total	145.466	24			

a. Predictors: (Constant), OE, Utility assets, Total assets [a]

b. Dependent Variable: ROA

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.397[a]	.158	.038	2.94315E6

a. Predictors: (Constant), OE, Utility assets, Total assets

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.409E13	3	1.136E13	1.312	.297[a]
	Residual	1.819E14	21	8.662E12		
	Total	2.160E14	24			

a. Predictors: (Constant), OE, Utility assets, Total assets

b. Dependent Variable: Operating Income(OI)

Correlations

		ROA	OI
Operating Efficiency	Pearson Correlation	-.572-**	.023
	Sig. (2-tailed)	.003	.912
	N	25	25
Utility Assets	Pearson Correlation	.949**	.011
	Sig. (2-tailed)	.000	.960
	N	25	25
Total Assets	Pearson Correlation	-.237-	.347
	Sig. (2-tailed)	.254	.089
	N	25	25

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).