www.iiste.org

Comparative Analysis of Financial Performance of Domestic and Foreign Banks in Tanzania

Bora Gretha Haule Alders gate College, Philippine

Abstract

The purpose of this study is to compare the financial performance of domestic and foreign banks in Tanzania for the period of 10 years from 2007 to 2016. The study used financial ratio analysis to measure financial performance and ANOVA to measure significant mean differences of profitability between domestic and foreign banks. Results of this study indicate that the profitability of Domestic banks is higher than the average profitability of the foreign banks. In addition the study investigates through quantitative research employing ANOVA if any significant means difference of profitability between domestic and foreign banks really exists. The results show that there is no significant means difference of profitability between peer banks groups in term of ROA and NIM, yet a significant means of difference is seen between the peer

Keywords: Financial Performance, Banking Sector, Domestic banks, Foreign Banks, Financial ratios

1.1 Introduction

The development and stability of an economy of any country depends upon the performance of financial industry. Banking industry is the vital part of financial system of a country and thus for sound economic growth, analyzing of banking sector performance is crucial (Sathye, 2001: Gishkori and Ullah, 2013). The presence of foreign banks in a domestic financial sector has both positive and negative implications, especially for a developing economy. One of the arguments is that foreign banks' presence brings positively in the development of a stable and strong domestic banking sector. The adoption of cutting edge technology by foreign banks in their banking services bring competitive pressure on the side of domestic banks and comparatively make them more efficient and profitable than domestic banks (Berger, DeYoung, Genay and Udell, 2001). The objective of this study is to analyze and compare the financial performance of domestic and foreign banks in Tanzania during the period from 2007 to 2016. Similar studies have been conducted to evaluate the banking sectors performance in developed and other developing countries. Very few studies have been conducted to evaluate the banking sector performance in Tanzania. Although Mataba and Aikaeli (2016), Zawadi (2014), Gwhula (2013), Zawadi (2013), Gwahula (2012) and Aikaeli (2007) have evaluated various issues relating to banking sector performance in Tanzania none of these studies have *analysed* and compared the financial performance of domestic and foreign banks. Banking sector in Tanzania can be either classified according to the form of ownership (domestic and foreign banks) or the size of banks assets (large, medium and small banks). All group of banks operate in the same markets, however each group faces different challenges. The study expects to analyze and compare financial performance variation both through time and across banks group. Study seeks to quantify and evaluate this anticipated financial performance variation across banks groups

The first step is to analyze and compare financial performance across the banks group. Study associate financial performance profitability, liquidity, asset quality, capital adequacy and management capacity, the study analyses the financial performance using financial ratio analysis. The second step to test significance of mean differences of profitability ratios between domestic and foreign banks by using analysis of variance (ANOVA).

The remainder of the paper structured as follows. Section, 2 reviews of relevant literature on banks financial performance, section 3 summarizes the methodology used to conduct the analysis; the subsequent section presents empirical results of the study and finally presenting the conclusions, managerial implications, limitations and Future research. The remainder of the paper structured as follows. Section, 2 reviews of relevant literature on banks financial performance, section 3 summarizes the methodology used to conduct the analysis; the subsequent section presents empirical results of the study and finally presenting the conclusions of the study.

1.2 Literature review

Several studies have been conducted globally on financial performance of banks using financial *ratio* analysis, due to the fact that, they generally acceptable and simple to understand by different users in reflecting banks' financial performance under given period, some researchers employed financial ratios to analyze the financial performance of banking sectors included: (*Vittas* 1991: *Denizer* 2000: Berger et al. 2000: Olsen and *Zoubi* 2008: *Nedunchezhian* and *Premalatha* 2013: *Radha* and Sultana 2013). *Claessens* et al. (2001) examined how profitability, overhead, taxes paid and interest margin differ between domestic and foreign banks by employing 7900 banks observations from 1988 to 1995 from 80 countries. The results showed that for developing countries, domestic banks have recorded lower profits than foreign banks, however the opposite results found for the case of developed countries. They argued that the presence of foreign banks is associated with lower profits margin for domestic banks. *Aktaş*

and Kargin (2007) analyzed and compared the financial performance of domestic and foreign banks in Turkey by employing financial ratios, they found that foreign banks recorded higher liquidity and capital adequacy ratios; in addition the results revealed that there are statistically significant profitability mean differences between domestic and foreign banks Vittas (1991) used three financial ratio analysis, asset quality, profitability and capital adequacy to evaluate the performance of banking sector in sixteen OECD countries from the period1980-1989. The results showed that on average banks in US, Europe and Norway had better asset utilization compared to banks in Japan and Luxembourg. In addition, the results found that on average banks in UK were the most profitable while banks in US were least profitable. San et al. (2011) evaluated the performance of foreign and domestic banks in Malaysia employing Data Envelopment Analysis approach; the study used 12 foreign banks and 9 domestic banks. They found that domestic banks have better performance than foreign banks. Doğan (2013) analyzed the financial performance of domestic and foreign banks in Turkey using the data of 10 foreign and 10 domestic banks for the period from 2005 to 2011. The results showed that ROE, asset quality, management effectiveness and total assets of foreign banks are lower than domestic banks; however for the case of capital adequacy ratio domestic banks has lesser ratio than foreign banks. Berger et al. (2000) employed of ROA and ROE to evaluate the performance of both domestic and foreign owned banks operating in US and Europe for the period from 1991-1997. The results showed that, the banking sector in US on average was better performing in term of ROA ROE, while in Germany and France the banking sector were poor performing in ROA and ROE. Denizer (2000) used profitability and operational efficiency ratios to measure the performance of foreign and domestic banks which were operating in Turkey banking system in the period from 1980 to 1997. The findings showed foreign banks have higher operational efficiency and profitability than domestic owned banks, the findings of the study attributed that, foreign owned banks reduced their operating cost more than those of domestic owned banks. Helhel (2015) evaluated the financial performance of domestic and foreign banks in Georgia for the period from 2009 to 2013 for the data of 9 foreign and 6 domestic banks by using profitability ratios which were measured in term of ROA, ROE, NIM and PEM. The results showed that there are significant differences of profitability between domestic and foreign banks in terms of ROA, ROE and NIM. Kumbrai et al. (2010) evaluated the performance of five large commercial banks in South Africa from 2005 to 2009, using financial ratios to analyze the liquidity, credit quality and profitability performance. The results showed that, there is improvement in the financial performance in term of liquidity, credit quality and profitability in the period of study. In addition, the results showed that there are significant mean differences in term of liquidity, credit quality and profitability in the period of study. Jha and Hui (2012) employing camel framework and multivariate regression model analyzed and compared the financial performance eighteen commercial banks in Nepal with different structures from 2005 to 2010. The results showed that public sector banks in Nepal recorded to have higher financial performance in term of ROA than those of domestic public and joint venture banks. Omran (2007) used financial ratios which included operational efficiency, profitability, growth and liquidity to measure the performance of private owned banks and state owned banks for the period from 1996 to 1999 in Egypt and the results found that on average the state owned banks found to outperform the private owned banks in all performance measures used. Sanaullah, (2009) determined the significance mean differences of banks in Pakistan for the period from 2006 to 2009 using 18 financial ratios by comparing the conventional and Islamic to gauge their performance. The results found that the Islamic banks were more liquid, productively methodical, and less insecure as well as manageable as conventional. Mesut (2013) used the financial ratios to investigate the financial performances domestic owned banks and foreign owned banks in Turkey during the period from 2005 to 2011 with the sample of 10 banks each. The results found that, the domestic owned banks had higher management effectiveness, asset quality management, total assets and return on equities than foreign owned banks. However, the domestic owned banks had lower lesser capital adequacy ratio than foreign owned banks. Sabi (1996) evaluated the performance of domestic and foreign banks in Hungary in the process of transition into a market-oriented economy. The study shows that foreign banks are more profitable than domestic banks and did not expose to a greater liquidity or credit risk the results indicate that foreign bank profitability is higher than the average profitability of the domestic banks although importantly, in the post crisis period, the gap between foreign and domestic profitability become closer. Chantapong (2005) compared the financial performance of foreign and foreign banks in Thailand and found that foreign banks are more profitable than the average domestic banks' profitability. Havrylchyk and Jurzyk (2006) evaluated the performance of domestic and foreign banks in Central and Eastern Europe by using the data for 265 banks for the period of 1995 to 2003, the results show that foreign banks are more profitable than domestic banks

1.3 Methodology

1.3.1 Data Collection and Sampling:

The study used quantitative technique of research to define the present study. Quantitative research shows quantifying connection between variables by using different statistical techniques for descriptive data analysis and the establishment of the proposed hypotheses (*Creswell*, 2008).

The data for this study was obtained from audited annual financial statements of individual banks for the

period of 10 years from 2007 to 2016. Out of 52 banks operating in Tanzania five domestic banks and five foreign banks were included in the sample of the study. The selection of the banks was mainly based on availability of data.

1.3.2 Objectives of the study.

The first objective of this study is to analyze and compare the financial performance of domestic and foreign banks from 2007 to 2016 using financial *ratio* analysis. The analysis will provide an overall assessment of financial performance and position of domestic and foreign banks that will assist in identifying the well performing peer groups.

The second objective of this study is to establish if there are really any significant mean differences between foreign and domestic banks, the study used Analysis of Variance (ANOVA).

In order to find the desired results about second objective of the study, the study has proposed following null hypotheses:

Ho1: There is no significant mean difference of ROA between domestic and foreign banks

Ho2: There is no significant mean difference of ROE between domestic and foreign banks

Ho3: There is no significant mean difference of NIM between domestic and foreign banks

1.3.3 Research Methods

The study is facilitated and supported by employing descriptive financial *ratio* analysis to evaluate, gauge and compare the financial performance of domestic and foreign banks in Tanzania. It looks back to the period of 10 years during 2007 to 2016. The first to analyze, compare and explain the financial performance of the selected banking peer groups by using profitability, asset quality, liquidity, capital adequacy and management capacity ratios, the financial ratios were calculated using the appropriate formula. To check the significance of mean differences between foreign and domestic bank here, the study employed the analysis of variance (ANOVA) to examine the likeliness of the proposed hypotheses.

1.4 Empirical Results and Discussion

According to the Bank of Tanzania (BoT) criteria, the study selected CRDB bank, NMB, EXIM bank, Azania bank and PBZ as domestic banks and *Barclays*, *Citi* Bank, NBC, *Stanbic* Bank and Standard Chartered Bank as foreign bank. One of a guiding factor for the measuring of banking sector performance is profitability. Profitability strengthens banks' financial position and averts unexpected loss accrued. Bank that consistently incurs loss will normally deplete its capital base which will usually put the owners as well as debt-holders at risk. In general as can be shown in profitability tables both banks group. As can be seen table 1a, both bank groups remained profitable and non bank group recorded a negative profit during the period of study, however there were slightly declined in the profitability for both per group in 2010 and 2011 due to the 2008 global financial crisis. Afterward there is an upward trend of profitability ratios for both bank peer group which was caused by decreasing of credit cost and a rise of operating profit of the banking industry.

1.4.1 Banking Sector Profitability Performance

In this study Return on Asset (ROA), Net interest Margin (NIM) and Return on Equity (ROE) were used to analyze and compare the profitability of domestic and foreign banks.

1.4.1.1 ROA

It is financial ratio; the role of ROA is to explain the company's profit percentage obtains against its entire assets investment. It is calculated as net income/total asset. ROA is used by banks as a valuable measure for analyzing their performance including utilize of scarce resources and financial strength. The results of ROA between domestic and foreign banks have been analyzed in Table 1

The statistical summary of data in Table 1 shows the downward trend in ROA for both bank peer group in the first five years of the study, domestic banks is 3.66% in 2007 and 1.88% in 2011 and foreign banks is 3.54% in 2007 and 1.84% in 2011, however this downward trends was due to global financial crisis in 2008. Afterwards both groups recorded upward trends on ROA, domestic banks is 2.28% in 2012 and 2.65% in 2016 and foreign banks record 2.24% in 2012 to 2.48% in 2016. However, in the comparison between the two means of ROA reveals that domestic banks did enjoy the high profitability with the mean of 2.55% than the counterpart of foreign banks which has a mean of 2.37%. The results also show that foreign banks recorded higher risk on ROA comparing with domestic with the standard deviation of 0.53.

1.4.1.2 ROE

It shows the profitability in relation to the shareholders' equity. The ratio is obtained by comparing the company net profits to its average shareholders capital. ROE evaluates the performance level of a company. The higher the ratio indicates an increase in the profitability of shareholders and possibly leads to an increase the dividend level. The results of ROE between domestic and foreign banks have been analyzed in Table 2 below

The statistical summary of data in Table 2 shows the downward trend in ROE for both domestic and foreign bank in the first five years of the study, domestic banks recorded ROE with 49.02% in 2007 and 15.96% in 2011; foreign banks recorded ROE with 34.14% in 2007 and 14.80% in 2011. Then the ratios for both banks rise from

16.26% in 2012 to 21.82% in 2016 for domestic banks and 15.60% in 2012 to 20.11% in 2016 for foreign banks. Domestic banks enjoy the higher profitability level with the mean value of 22.73% comparing with foreign banks with 18.58% and this it may attract more potential investors this group of banks. However, the results show that domestic banks recorded higher risk on ROE comparing with domestic with the standard deviation of 9.92.

1.4.1.3 NIM

Net Interest Margin is defined as the balance of the interest income that the banks create and the amount of interest received by the depositors. NIM is obtained by dividing the difference between the earning on loans in a period and the rate of interest paid on the funds borrowed by the average earning assets. The results of NIM between domestic and foreign banks have been analyzed in Table 3

The data summarized in Table 4.3 shows the decline in NIM in the year 2010 for both banks groups, from 20.80% in 2007 to 14.20% in 2010 for domestic banks and from 17.60% in 2007 to 11.20% in 2010 for foreign banks. The main causes for this decline is high operating costs and increasing trends of non-performing loans for banking sector in Tanzania... However, an increase in trend for both banks group has been recorded during 2014 from 15.80% and 18.50% for domestic and foreign banks respectively. Generally both groups are profitable in term of NIM during the period of study; no group has recorded the negative NIM.

1.4.2 Banking Sector Liquidity Performance

In the banking sector liquidity describe the ability to satisfy demand for cash in exchange for deposits. A bank is considered to be liquid when the bank has in various forms and locations plus investment insecurities that are easily available at a short notice without loss or much loss to the bank. Banking sectors across the globe are usually facing with liquidity problems due to poor liquidity management. Thus analyzing the liquidity performance of the banking sector is essential. This study used cash and deposits to total assets and customers deposits to total assets ratios as the measures of liquidity in the banking sector

1.4.2.1 Cash and Deposits to Total Assets

The data summarized in Table 4 shows the trends of liquidity performance of domestic and foreign banks, which is measured in term of cash and deposits to total assets based on mean measure foreign banks has higher level of liquidity compared to domestic banks with a mean value of 48.31% than domestic banks with the mean of 47.03% during the years of study. On the other hand, based on standard deviation indicate a high dispersion and instability levels of this ratio in domestic banks than foreign banks

1.4.2.2 Customers Deposits to Total Assets

This ratio shows the ability of a bank to utilize its customers deposit to finance the bank activities.

Based on the mean measure the summary results in Tables 5 show that foreign banks depend more on customers' deposits in financing its operating activities with a mean ratio of 61.61% than domestic banks with 56.10%. In addition, based on standard deviation indicates a high dispersion and instability levels of this ratio in domestic banks than foreign banks.

1.4.3 Banking Sector Asset Quality Performance

Banks asset quality referred to the quality of the loan as the overall risks which are attached to the various assets which are held by an individual bank. In the banking sector asset quality management is essential because asset quality determines how many assets in a particular bank are at financial risk and how many allowances for potential losses it must make. The asset quality is one of the key indicators to measure the strength of banking sector. Thus, analysis of the asset quality is viewed as an important part of banking sector quantitative execution evaluation. This study used the ratio of non-performing loans to total loans (GNPA) to measure the asset quality of the banks. This implies that for better asset quality, banks need to maintain lower rate of this ratio.

The statistical summary of data in Table 6 shows the asset quality trends the period from 2007 to 2016 for both domestic and foreign banks, the results indicate that there are upward trends of the asset quality for both banks from 2.92% in 2007 to 4.90% in 2016 for domestic banks and 6.86% in 2007 to 8.20% in 2016. Domestic banks recorded lower rate of asset quality ratio with the mean value of 3.97% compared with foreign banks with mean value of 8.74%. The mean ratio of the asset quality for foreign banks recorded 8.74%, this implies that more stringent credit risk management practices are required to be adopted by foreign banks before and after lending in order to minimize and maintain the quality asset ratios below 5.00% as per requirement of international standards.

1.4.4 Banking Sector Capital Adequacy Performance

It is important for banks to maintain the confidence of the investors and prevent them from bankrupt, thus capital adequacy indicates the overall financial condition of banking sector and the ability of administration to overcome the need of additional capital (*Ravinder*, 2012). It is a key parameter for evaluating the quality and soundness of keeping money framework banks with a sensible. The summary results of capital adequacy performance are shown in Table 4.7

Based on the results in Table 7 the averages of CAR for both groups of banks are highly impressive. Both banks peer group maintain less similar capital adequacy ratios with the mean values of 11.24% and 11.53 for domestic and foreign banks respectively. However, the capital adequacy for both groups has been recorded much higher than international standards set by the Basel Capital Accord.

www.iiste.org

1.4.5 Banking Sector Management Capacity Performance

The study used the ratio of total expenses to total loans and advances to define the operating efficiency ratio of the banks which describe the management capacity performance. The results of management capacity performance banks peer groups is shown in Table 8

Based on the results in table 4.8 foreign banks managed to maintain lower in this ratio over the years of study with a mean value of 9.99% with lower level of variability of 0.76%: compared to domestic banks with mean value of 12.02% and higher level of variability of 1.02%...

1.4.6 Data Analysis and Results

The second objective of this study is to find out if there are any significant mean differences of the financial performance between domestic and foreign banks in Tanzania during 2007 to 2016 by using profitability measures of ROA, ROE and NIM for which the study has tested the proposed null hypotheses

1.4.6.1 ROA

With a view to find the degree of association of Return on Asset between selected domestic and foreign banks, Analysis of Variance (ANOVA) has been used and the summary results are exhibited in Table 9.

Hypothesis: 1

Ho₁: There is no significant mean difference of ROA between domestic and foreign banks

The ANOVA table results show that the P'-value (0.1134) is greater than $0.05(\alpha)$, this mean that the mean difference in profitability of two bank peer groups is not significant at 5% level of significance. Thus, the alternative hypothesis is rejected and null hypothesis is accepted. Therefore, there is no statistically significant mean difference on ROA between domestic and foreign commercial banks. This implies that the financial performance of domestic and foreign banks in Tanzania during the period of study has been more or less the same in the context of ROA

1.4.6.2 ROE

With a view to find out the degree of association of Return on Equity between selected domestic and foreign banks, Analysis of Variance (ANOVA) has been used and the summary results are exhibited in Table 10.

Hypothesis: 2

Ho₂: There is no significant mean difference of ROE between domestic and foreign banks

The ANOVA table results show that the P'-value (0.0428) is less than $0.05(\alpha)$, this mean that the mean difference in profitability of two bank peer groups is significant at 5% level of significance. Thus, the alternative hypothesis is accepted and null hypothesis is rejected. Therefore, there is statistically significant mean difference on ROE between domestic and foreign commercial banks. This means that domestic and foreign banks in Tanzania during the period of study have recorded difference in financial performance level when ROE is considered.

1.4.6.3 NIM

With a view to find out the degree of association of Net interest margin between selected domestic and foreign banks, Analysis of Variance (ANOVA) has been used and the summary results are exhibited in Table 11 *Hypothesis: 3*

Ho3: There is no significant mean difference of NIM between domestic and foreign banks

The ANOVA table results show that the P'-value (0.607) is greater than $0.05(\alpha)$, this mean that the mean difference in profitability of two bank peer groups is not significant at 5% level of significance. Thus, the alternative hypothesis is rejected and null hypothesis is accepted. Therefore, there is no statistically significant mean difference on NIM between domestic and foreign commercial banks. This implies that the financial performance of domestic and foreign banks in Tanzania during the period of study has been more or less the same in the context of NIM

1.5 Conclusions

The central objective of the study is to analyze and compare the financial performance of domestic and foreign banks in Tanzania for the period of 10 years from 2007 to 2016. The comparative financial performance of domestic and foreign banks have been evaluated and appraised based on profitability, liquidity, asset quality capital adequacy and management capacity.

The findings of the study show that both banks group are financially viable as both have employed the appropriate financial techniques and policies to manage their banks and to adapt to their dynamic and flexible environment factors, resulting in a modest maximization of their profits. Profitability values which measured in term of ROA, ROE and NIM are very changeable during the period of study for both groups and both banks groups remained profitable. However, in term of ROA and ROE domestic banks recorded higher mean values of 2.55% and 27.73% compared with foreign banks of 2.37% and 18.58%. The liquidity level in domestic banks is lower than that of foreign banks. In the case of asset quality the results indicated that domestic banks managed to maintain lower rate of asset quality ratios compared with foreign banks: foreign banks recorded highest mean value of 8.74% which is above the average standard of 5.00%. Thus, foreign banks need to improve their processes of screening credit customers and monitoring of credit risk in order to minimize the asset quality ratios. As far as management

efficiency ratios, the analysis showed that foreign banks managed their operations with a lower level of costs than domestic banks. However, both banks' peer groups have unsatisfactory performance on operating efficiency ratios because their mean values are above the average. The mean of CAR for both groups of banks are highly impressive. In addition, the ANOVA summary Tables show the results of profitability performance of banks peer groups selected for the study here has been more or less the same in terms of ROA and NIM. This implies that the financial performance of domestic and foreign banks has remained equally the same in term of ROA and ROE. However, a significant means difference is found between banks peer groups in term of ROE, which implies that domestic and foreign banks differ from each other in term of ROE. Despite of financial crisis in the world market the performance of banking sector in Tanzania has been remarkably sound and stable observed in the light of their contemporary world phenomena. Thus, to sum up, the performance of the Tanzanian banking industry cannot be underestimated, hence it needs to extend a more encouraging and outstanding support to the process of economic recovery to prove its efficiency vibrantly ensuring greater sustainability and growth.

ACKNOWLEDGMENTS

I would like to convey heartfelt thanks and appreciation to all those, who in one way or another, contributed to the successful completion of this paper. Sincere appreciation is extended to the reviewers of this paper for their constructive comments. Special thanks should also be extended to Editor of and Dr. Don for their continued support and encouragement. I would like also to put on record my sincere gratitude to those who have at different stages of this work been very encouraging and supportive

References

- Aktaş, H., Kargın, M., A (2007) Comparison of Financial Ratios of Foreign and Domestic Banks in Turkish Banking Sector, CBU Yönetim ve Ekonomi (Journal), Volume: 14, Issue: 2, page: 25-44,
- Berger, A.N., DeYoung, R., Genay, H. & Udell, G. (2001), 'Globalisation of Financial Institutions: Evidence from Cross-Border Banking Performance', Brookings-*Wharton Papers on Financial Service*, 3, .23-120
- Chantapong, S. (2005) Comparative study of domestic and foreign bank performance in Thailand: The regression analysis. *Economic Change and Restructuring 38: 63-83*.
- Claessens, S., Demirgüc-Kunt, A., Huizanga, H.(2001), How does foreign entry affect domestic banking markets, Journal of Banking and Finance, Volume 25, Issue 5, Pages 891–911,.
- Creswell, J. W. (2008). Research design: A qualitative, quantitative, and mixed method approaches (2nd Ed.). Thousand Oaks, CA: Sage. Publications Retrieved from http://macrothink.org/journal/index.php/ije/article/view
- Denizer, C. (2000), Foreign Entry in Turkey's Banking Sector, Policy Research Paper, *The World Bank*,2462, .1-29
- Doğan, M.,(2013) Comparison of financial performances of domestic and foreign banks: The case of Turkey, International Journal of Business and Social Science, Vol. 4, No. 1., pp:233-240,
- Gishkori, M, A and Ullah, N (2013) Technical Efficiency of Islamic and Commercial Banks: Evidence from Pakistan Using DEA Model, *IOSR Journal of Business and Management*, 7, 68-76
- Gwahula R (2013) Bank-specific, industry-specific and macroeconomic determinants of bank efficiency in Tanzania: A two stage analysis, *European Journal of Business and Management*, 5, 142-154
- Havrylchyk, O and Jurzyk, E (2006) Profitability of foreign banks in Central and Eastern Europe: Does the entry mode matter?, Bank of Finland. *BOFIT Discussion Papers 5*
- Helhel, Y (2015) Comparative Analysis of Financial Performance of Foreign and Domestic Banks in Georgia, International Journal of Finance and Accounting 2015, 4(1): pp. 52-59
- Jha, S, and Hui, X. (2012) A comparison of financial performance of commercial banks: A case study of Nepal, African Journal of Business Management, Vol. 6(25), pp. 7601-7611,
- Kumbirai, M and Webb, R, (2010) A financial Ratio Analysis of Commercial Bank Performance in South Africa *African Review of Economics and Finance*, 2, pp.30-53
- Nedunchezhian, V, R & Premalatha, K, (2013) Analysis and impact of financial performance of Commercial Banks after Mergers in India International Journal of Marketing, Financial Services & Management Research, .2, .150-162
- Olsen, D. & Zoubi, T.A. (2008), Using Accounting Ratios to Distinguish between Islamic and Commercial Banks in the GCC Region *the International Journal of Accounting*, *43*, *45-65*
- Omran, M. (2007), Privatisation, State Ownership, and Bank Performance in Egypt, *World Development*, 35, .714-733
- Ravinder G (2012) A camel model analysis of nationalized banks in India, International Journal of Trade and Commerce 1: 23-33
- Radha, V, N & Sultana, T (2013) Financial Performance Analysis in Banking Sector a Pre & Post Merger Perspective International Monthly Refereed Journal of Research in Management & Technology, 2, 56-66

Sabi, M. (1996) Comparative Analysis of Foreign and Domestic Bank Operations in Hungary Journal of Comparative Economics 22, pp. 179-188.

San, O., T., Theng L., L., Heng, T., B., (2011) A Comparison on Efficiency of Domestic and Foreign Banks in Malaysia: A DEA Approach, Business Management Dynamics, Vol.1, No.4, pp.33-49,

Sanaullah, a (2008) Financial Performance of Islamic and Conventional Banks in Pakistan: A Comparative Study, 8th International Conference on Islamic EconomicsandFinanceRetrievedfromhttp://conference.gfis.edu.ga/app/media/287

Sathye, M (2001) X-efficiency in Australian banking: An empirical investigation, Journal of Banking & Finance, 25, 613-630

Vittas, D. (1991) 'Measuring Commercial Bank Efficiency: Use and Misuse of Bank Operating Ratios', Working Paper 806, Country Economics Department, The World Bank, pp.1-54

Zawadi, Ally. (2013). Comparative analysis of financial performance of commercial banks in Tanzania, Research Journal of Finance and Accounting, Vol.4, no.19

Indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	3.66	2.94	2.20	2.26	1.88	2.28	2.48	2.56	2.58	2.65	2.55	0.49
FB	3.54	2.58	2.80	1.88	1.84	2.24	1.95	2.15	2.35	2.48	2.37	0.53
Source: Ann	ual rana	rta										

Source: Annual reports

Table:2: Return on Equity (ROE) - Bank Group-Wise (In Percent)

indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	49.02	28.84	19.6	19.7	15.96	16.26	18.21	18.68	19.21	21.82	22.73	9.92
FB	34.14	20.72	18.48	17.16	14.8	15.6	17.8	18.1	18.9	20.11	18.58	6.69
Source: Annual reports												

Source: Annual reports

Table 3: Net Interest Margin (NIM) - Bank- Group-wise (In Percent)

Indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	20.80	21.80	18.00	14.20	16.40	13.60	14.20	15.80	16.20	17.50	16.85	2.75
FB	17.60	13.80	12.80	11.20	16.40	16.80	17.60	18.20	18.50	18.80	16.17	2.61
Source: Ann	ual renor	ts										

Source: Annual reports

Table 4: Cash and Deposits to Total Assets - Bank- Group-wise (In Percent)

Indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	56.4	53.6	47.4	47.8	51.2	43.2	43	42.8	42.6	42.3	47.03	5.16
FB	46.6	55.6	42.8	48.4	51	50.6	48.6	47.8	46.5	45.2	48.31	3.53
Source: Annu	ual repoi	ts										

Table 5: Customers Deposits to Total Assets - Bank- Group-wise (In Percent)

Indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	65.8	64.8	57.4	57.4	60.8	52	51.2	50.8	50.6	50.2	56.10	6.05
FB	54.2	67.6	53.6	61.2	64	61.8	62.6	62.8	63.5	64.8	61.61	4.43
Source: Anni	ual renoi	rte										

Source: Annual reports

Table 6: Asset Quality - Bank- Group-wise (In Percent)

indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	2.92	4.06	2.02	3.24	4.86	4.06	4.20	4.60	4.80	4.90	3.97	0.95
FB	6.86	8.62	6.32	9.28	12.16	9.80	9.20	8.60	8.40	8.20	8.74	1.61
Source: Annu	ual report	rts										

Table 7: Capital Adequacy - Bank- Group-wise (In Percent)

Indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	8.6	9.6	10.8	11	11.6	12.6	12.8	12.4	11.8	11.2	11.24	1.33
FB	8.8	11.4	12.6	14.2	13	11.4	11.3	11.2	10.8	10.6	11.53	1.47
Source: Annual reports												

Source: Annual reports

Table 8: Management Capacity - Bank- Group-wise (In Percent)

Indicators	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Mean	SD
DB	14	12.6	12.8	12.6	11.6	12	11.8	11.4	10.81	10.6	12.02	1.02
FB	9	11.6	10.6	10.2	10.4	10	9.81	9.68	9.42	9.2	9.99	0.76
Source: Annual reports												

Source: Annual reports

Table 9: Analysis of Variance for Return on Asset

SS	df	MS	F	P-value	F-Crit
0.16928	1	0.16928	3.07459	0.113426	5.117355
4.18822	9	0.46536			
4.85302	19				
	0.16928 4.18822	0.16928 1 4.18822 9	0.16928 1 0.16928 4.18822 9 0.46536	0.16928 1 0.16928 3.07459 4.18822 9 0.46536 0.46536	0.16928 1 0.16928 3.07459 0.113426 4.18822 9 0.46536 0.113426

Source: Researcher 2017

Table 10: Analysis of Variance for Return on Equity

Source of Variation	SS	df	MS	F	P-value	F-Crit
Between Groups	86.071	1	86.071	5.5526	0.042854	5.117355
Within Groups	1149.28	9	127.698			
Total	1374.86	19				
Source: Researcher 2017						

Source: Researcher 2017

Table 11: Analysis of Variance for Net Interest Margin

Source of Variation	SS	df	MS	F	P-value	F-Crit
Between Groups	2.312	1	2.312	0.283882	0.6070707	5.11735501
Within Groups	56.368	9	6.263111			
Total	131.978	19				
Common Dessenation 2017						

Source: Researcher 2017