Evaluation of Financial Performance of Foreign and Domestic Banks Operating in Tanzania

Dr Josephat Lotto

The Institute of Finance Management, 5 Shaaban Robert Street, PO BOX 3918, 11101 Dar es Salaam, Tanzania

The research is financed by The Institute of Finance Management

Abstract

This study aimed at conducting a comparative analysis of the financial performance of foreign owned banks and domestic banks operating in Tanzanian banking sector for the period between 2009-2016 using DuPont model and the paired-sample t-test analysis. The model depicts that return on equity of banks is affected by three parameters namely; Profit margin (PM), Assets utilization AU and Equity Multiplier (EM). The results of the analysis show that both returns on equity (ROE) and return on assets (ROA) of foreign banks are higher than those of the domestic banks. The higher ratios of ROA and ROE observed in foreign banks may have been caused by reported higher interest margin (PM) and Equity Multiplier (EM) signifying a better cost management and use of large financial leverage by foreign banks than domestic banks.Based on the results portrayed by this study we may conclude that foreign banks in Tanzania not only have higher return on assets ratio (ROA), but also higher return on equity (ROE) ratio due to a larger use of financial leverage rather than the profitable use of assets. This implies that, compared to domestic banks, foreign banks manage their capital more efficiently than their domestic counterparts

Key words: Foreign, Domestic, Banks, Performance, DuPont

1. Introduction

Since after the liberalization policies of the 1990s foreign-capital banks have been more crucial in developing countries such as Tanzania. The globalization and freedom to enter any market introduced many new players in the banking industry in developing countries, Schmukler, (2004). According to Schmukler, (2004) what is called mobility in international banking sector has emerged following these developments. In the last two decades we have observed a considerable increase in foreign capital flows in Tanzania through emergence of many foreign banks, from both advanced and developing countries.

Despite the interruption by the global financial crisis, foreign bank presence in Tanzania has increased substantially. Taking stock just before the last global financial crisis, at the end of 2007, there were only 12 foreign banks among 33 registered banks in Tanzania (36%) while most recently, in 2014, there were 22 foreign banks among 49 registered banks (46%). Such introduction of foreign banks in the domestic banking industry may have a possible effect on domestic banks operations as stipulated by Helhel, (2015).

Different views concerning the possible effects of foreign banks entry have been presented lately by various writers in this area. The first view is that presented by Levine Ross (1996), which argues that the emergence of foreign banks may motivate domestic banks to minimize costs and improve the quality of financial services through competition. Additionally, introduction of foreign banks may also promote domestic banks to formulate more advanced banking operations and techniques. The second view relates to ability of the foreign banks facilitate access to foreign capital for domestic projects, Bhattacharya (1993). More importantly, it is alleged that foreign banks are keen to use corporate governance principles and put more emphasis on risk management practices and hence assured of better performance as compared to their domestic counterparts. The third view is that of improved access to foreign capital flow. According to Meltzer (1998) a presence of a foreign bank increases the amount of funding available to domestic projects by facilitating capital inflows.

On the other hand, it is believed that because structure and features of foreign banks are different from those of domestic banks, the performance of the two bank categories is more likely to be different. Using Tanzanian banks' data for the period of 2009-2014 for all banks (49) this paper tries to analyze the performance difference between foreign controlled banks and their domestic counterparts in Tanzania.

The remainder of the paper is structured as follows. Section 2 presents the review of the relevant literature and section 3 presents the data and methodology to be used while section 4 contains the empirical results. Lastly, the paper will provide its conclusion in section 5.

2. Related Literature

Several studies such as Chantapong (2010), and Jeon and Miller (2010) have compared the performance of domestic banks against their foreign counterparts in Thailand and Korea respectively. The studies compared the profitability of the two categories of banks. On the other hand Unsal and Duman (2010) applied principal component analysis in comparing privately and state-owned domestic banks and foreign banks operating in Turkey. All their findings confess that foreign owned banks have relatively better performance as compared to

their domestic counterparts.

Many studies, for instance Levine, (1996); Walter and Gray, (1983); Goldberg and Saunders, (1981); Gelb and Sagari, (1990) acknowledge that foreign banks are better in terms of resource allocation and higher efficiency. Moreover, according to Levine (1996) the emergency of foreign banks may come with advantages such as; enhancing domestic financial development by promoting improvement of domestic financial infrastructure and financial policy, improving a country's access to international capital markets, improving the financial services quality in domestic banks by stimulating bank competition and subsequently encouraging the domestic banks implementing more advance banking skills and technology.

It should also be understood that there are as well the bad side of entry of foreign banks in local banking sector as stipulated by Stiglitz (1993) and Claessens et al (2001). According to Stiglitz (1993) and Claessens et al (2001) such disadvantages may include; bringing impact to domestic banks by forcing domestic banks incurring competition costs of by applying more advanced banking skills and technology which are costly to implement; introduction of certain risks to domestic banks by foreign banks in making the competition more intense which ultimately reduce the earnings of domestic banks

Dorothea and Oleksandr (2007) analyzed 160 Ukraine banks between 2003 and 2005 and reported that the participation of foreign banks in the banking business in Ukraine had a positive impact on banks' profitability by showing a positive relationship between domestic banks' profitability and share of foreign banks assets in Ukraine. This effect is reported to be more significant when banks are large, small and most profitable, whereas it loses its importance for the least profitable banks.

Wahid and Rehman (2009), using sample of Pakistan banks, conducted a study to confirm the allegation that the foreign based banks are more profitable that domestic ones. The results show that foreign banks operate more efficiently than their domestic counterparts .Ali (2005), using Lebanon sample, compared foreign banks and domestic ones based on their profitability and found that foreign banks performed better than domestic banks and that foreign controlled banks are not heavily affected by the macroeconomic factors of the host country as compared to domestic banks.

The study of CEE countries conducted by Janek (2004), on the short term effects of foreign banks entry on bank performance, revealed a negative effect of foreign banks entry on domestic banks' revenues from interest-earning assets, non-interest income, and profitability. The study further reports that foreign banks entry also raises domestic banks' overhead costs in short term. The author also observed that foreign banks entry increases competition, reduces before tax profits, non-interest income, average loan interest rate and loan loss provisions.

Comparing developed and developing countries, Claessens et al (2001) show that the profitability of foreign controlled banks is greater than that of domestic banks in developing countries while the opposite is true for developed countries. It is reported that an increased presence of foreign banks is associated with a reduction in profitability and margins for domestic banks in developed countries.

Using various financial ratios Aktaş and Kargın (2007) conducted a comparison study between foreign and domestic banks in Turkey and the results show that foreign banks are associated with higher "capital adequacy" and "liquidity" ratios as compared to their domestic counterparts. The study further reveals a statistically significant difference in the ratios related to "revenue-cost structure between foreign and domestic commercial banks.

3. Data and Methodology

This study applied the DuPont financial analysis model to assess and compare the financial situation between the domestic and foreign banks operating in Tanzanian's banking sector. This model has commonly been used by various writers such as Cole (1973), Dietrich (1996), Saunders (2000), Koch and MacDonald (2002), Vensel et al. (2004).

The data used in this study are extracted from banks' annual records from the balance sheet and income statements of banks. 49 banks are included in this study, out of which 23 are domestic banks and 26 foreign banks from 2009 to 2014. A bank is categorized as foreign if its ownership is on the hands of foreign investors by at least 51% otherwise it is categorized as domestic.

According to DuPont financial analysis model, Return on Equity is influenced by three parameters: the Profit Margin (PM), Assets Utilization (AU) and Equity multiplier (EM). The application of the model begins by calculating the Return on Equity ratio. The Return on Equity measures the earnings of the banks for each unit of capital the bank invests. Higher Return on Equity (ROE) ratio means that the Return on Equity (ROE) is linked to the Return on Assets (ROA) by the equity multiplier (EM), which is equal to the total funds compared to the total capital as follows:

$\mathbf{ROE} = \mathbf{ROA} * \mathbf{EM}.$

This implies that a higher or lower ratio of Return on Equity may be obtained by either increasing ROA or by increasing the financial leverage (EM). On the other hand Return on Assets measures the banks profit for

each unit of invested capital. It indicates the management of efficiency in using its assets to generate earnings. Likewise, bank's Equity Multiplier (EM) shows the comparison of the funds in relation to the bank's capital, and the higher EM reflects that banks are financed more by debt than the shareholders' equity. The bank with higher EM is more likely recording higher ROE although it is vulnerable to bankruptcy risk as highlighted by (Peter Rose 2002).

After calculating ROE we break down the Return on Assets (ROA) to Profit Margin and Assets Utilization (AU) as follows;

ROA= PM x AU

Profit Margin (PM) represents banks after tax profit which is calculated by dividing net income by total income. PM shows the bank's efficiency as a result of controlling costs and keeping loan losses low. To show that the banks manage their expenditure efficiently we also break down the operating costs components into Interest Expense ratio, Non-interest expense ratio, Provisions for loan loss ratio and Tax ratio as previously done by Saunders (2000)

Another component influencing ROA is Assets Utilization ratio (AU) which indicates the extent to which banks efficiently utilizes its assets to generate income. This ratio is calculated by dividing total income with total assets. The greater the use of assets is the greater is the bank's ability to generate earnings from their assets.

According to Koch et al (2002) factors influencing Assets Utilization include bank's interest rate risk management practices, liquidity management and bank's assets structure.

4. Analytical Results and Discussion of Findings

The results presented in table 1 and 2 below generally show that both domestic and foreign banks have positive return on assets and return on equity throughout the study period.

However, when you compare the performance of two categories of banks the results show that foreign banks are more profitable than their domestic counterparts, where the average return on equity for foreign banks during the study period (2009-2014) is 21% while that of domestic banks is lower at only 4%.

This finding is consistent to several previous studies such as Claessens et al (2001) who confirmed that in developing countries profitability of foreign controlled banks is greater than that of domestic banks due to the facts that an increased presence of foreign banks is associated with a reduction in profitability and margins for domestic banks. The results are also in line with Rehman (2009) and Ali (2005) who compared foreign banks and domestic ones based on their profitability in Pakistan and Lebanon respectively and found that foreign banks performed better than domestic banks when performance is measured using ROA and ROE.

The table 1 and 2 show that the highest level of returns on equity the foreign banks have reached in 23 % in 2009 while domestic banks recorded only 6.6% as the highest level of returns on equity in 2014. Likewise, in terms of returns on assets foreign banks have reported the highest average ROA of 2.8% in 2009 while their counterparts, domestic banks, reported the highest average ROA of 1.1% in 2011. It is observable from table 1 and 2 below, that the low profitability measured by ROE of the domestic banks is mainly due to the lower average ROA of 0.8% and equity multiplier of 5.6 during study period compared to foreign banks whose average ROA is higher at 2.5% with average equity multiplier of 8.35 during the same period of time. Based on the results portrayed above, the study may conclude that foreign banks in Tanzania not only have higher return on assets ratio, but the high return on equity (ROE) ratio was due to a larger use of financial leverage rather than the profitable use of assets. This implies that, compared to domestic banks, foreign banks manage their capital more efficiently.

The financial leverage ratio for the 2009 to 2014 period depicts that foreign banks have a higher financial leverage ratio of 15.25 compared to that of domestic banks which is 8.5 times. Following such higher average financial leverage ratios used by foreign banks it is not surprising to find foreign banks having higher Returns on Equity than the domestic banks. Another explanation can also be built on the figures of equity multipliers presented in this study where the average equity multiplier (EM) for foreign banks (8.35 times) is higher than that for domestic banks (5.6 times). From these figures we get an insight that foreign banks have had higher level of risk than domestic bank and from a basic finance theory one may not get surprised why foreign banks were more profitable than domestic banks because the more risk you take you have to expect a corresponding level of returns.

The results presented in table 1 and 2 further shows that the average profit margin recorded by foreign banks is higher (15.1%) than that for domestic banks (13.7%). This results of profit margin shows that foreign banks in Tanzania are able to control better costs and loan loss as compared to the domestic banks. Table 1 and 2 also shows that foreign banks have higher asset utilization ratio which stands at an average of about 17% during the study period while the domestic banks record an average of only 6% for this ratio. This basically shows that foreign banks have been able to attain higher assets yields than domestic banks.

Table 1: Performance of Foreign Banks in Tanzania during 2009-2014

Financial Ratios	2009	2010	2011	2012	2013	2014	
Return on Equity (in %) ROE	0.230	0.204	0.232	0.210	0.194	0.198	
The Components of ROE= ROA x EM							
Return on Assets (in %) ROA	0.028	0.024	0.026	0.024	0.024	0.026	
Equity multiplier (in times)	8.23	8.50	8.91	8.75	8.08	7.60	
The Components of ROA= PM x AU							
Profit Margin (in %) PM	0.146	0.157	0.161	0.146	0.152	0.143	
Asset Utilization (in %) AU	0.193	0.154	0.161	0.165	0.158	0.185	

Table 2: Performance of For Domestic Banks in Tanzania during 2009-2014

Financial Ratios	2009	2010	2011	2012	2013	2014	
Return on Equity (in %) ROE	0.046	0.051	0.045	0.032	0.025	0.066	
The Components of ROE= ROA x EM							
Return on Assets (in %) ROA	0.007	0.007	0.011	0.009	0.005	0.009	
Equity multiplier (in times)	6.50	7.33	4.14	3.50	5.00	7.33	
The Components of ROA= PM x AU							
Profit Margin (in %) PM	0.135	0.129	0.129	0.142	0.142	0.143	
Asset Utilization (in %) AU	0.055	0.057	0.087	0.068	0.033	0.063	

So as to establish whether the claimed difference between performance of foreign and domestic banks is statistically significant the study applied the paired-sample *t*-test analysis. The test result presented in table 3 below shows that there are observed significant differences between the domestic and foreign banks when comparison is made on ROA, ROE, Equity multipliers (EM), Asset utilization ratios (AU) and Profit Margin (PM). Specifically, the study finds that Asset Utilization ratio and ROE have a significant difference between foreign and domestic banks. The results show that foreign banks have higher values of ROA and AU and the difference is strongly statistically significant at 1% significant level. While foreign banks have shown higher EM and ROA than domestic banks with the difference statistically significant at 5% significant level, difference in profit margin (PM) between foreign and domestic banks is reported to be statistically significant only at 10% significant level as shown in table 3.

In general, it is revealed by the t-test analysis that the foreign banks performed better than their domestic counterparts. This implies that the responsibility for performance lies exclusively on the individual banks to exploit and make use of their assets efficiently to generate sufficient revenue. This has been the characteristic of the foreign banks, when it comes to asset utilization, possibly due to their ability and experience from different countries to manage their banking business innovatively as previously earmarked by Berger (2007) and Sturm and Williams (2009).

One would expect local banks which have relatively better knowledge and experience of the banking business environment in Tanzania to outperform the foreign banks, but the fact suggested by Fang et al., (2007) show that some subsidiary entrants are more often given competitive advantage by posing more strategic and valuable information relative to similar existing firms about the market they are entering. This may also be the case for Tanzanian foreign-owned banks. Furthermore, better performance of foreign banks is not very much surprising following the fact that most foreign banks in Tanzania are larger than their counterparts, domestic banks. Larger banks are proven to perform better than smaller ones as stipulated by Damoah (2013). Not only is the size of the foreign banks but also location of these banks is used as a strategic factor to enhance their financial performance as highlighted by Damoah (2013). In Tanzania this case is evidenced because you can only find giant foreign banks like Stand Chart banks, Barclays bank, Stanbic, Citibank etc. only in city centers where there is a good business and due to the nature of their clients you may hardly find the accumulation of non-performing loans which more often tend to deteriorate the banks' performance

Other industry factors which may be responsible for catalyzing the foreign banks' better performance may include, among others, superiority in advanced technology, access to capital, and the competitive advantage in utilizing available resources in an effective manner. Foreign banks have technology advantage over domestic banks because some advanced technologies used in parent banks may be easily transferred to their subsidiaries in Tanzania at a relatively cheaper price as suggested by Rugman and Verbeke, (1990). Hulbert et al. (1980) also recognize that strong planning and strategic marketing plan formulation executed by foreign banks

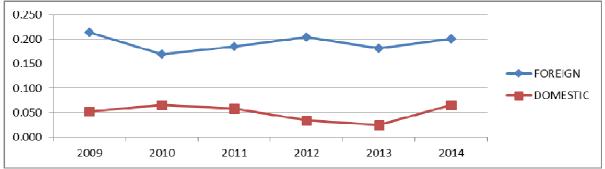
affect significantly their better performance. This doesn't mean that local banks plan less and have no welltrained managers but that most strategies and plans used by foreign banks are set from top management levels in their parent banks and such strategies and plans are said to have been tested and worked elsewhere in the other business world hence thought to be more superior than those of the local banks. This view is supported also by Hulbert et al. (1980).

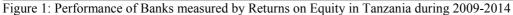
Tuble 5. Mean sample t lest results between i oregn and Bonnestie banks						
Variable	Mean Foreign	Mean Domestic	Mean Difference	t-stat/ P-value		
ROA	0.028	0.011	0.017	2.21** (0.043)		
ROE	0.21	0.04	0.18	5.97*** (0.002)		
РМ	0.151	0.137	0.014	1.89* (0.067)		
EM	8.35	5.6	2.75	2.45** (0.038)		
AU	0.17	0.06	0.11	3.87***(0.005)		

Table 3: Mean sam	ple t-test results between	Foreign and Domestic b	anks

Note: * significant at 10% significant level, ** significant at 5% s.l, *** significant at 1% s.l

The graph 1 below shows the trend of the returns on equity for the period of the study. The graph shows that between 2009 and 2010 ROE for domestic banks was slightly increasing while the opposite was happening for foreign banks were ROE was rapidly decreasing. The trend changed between 2010 and 2013 where the returns on equity for domestic banks was at a decreasing trend while for foreign banks the sharp increase was observed between 2010 and 2012 and then a fall between 2012 and 2013 before it again raised between 2013 and 2014. The graph also shows that, as in foreign banks, for domestic banks the similar increasing trend of ROE was also observed between 2013 and 2014





On the other hand, the average returns on assets for foreign banks are higher at 2.8% compared to that of domestic banks which is 0.8% during 2009-2014 as shown in table 1 and 2. The trend analysis presented in graph 2 below shows that between 2009 and 2010 returns on assets ratio was increasing for domestic banks while the opposite was observed for foreign banks. Between 2010 and 2011 a further increase in ROA was observed for domestic banks and then a rapid decrease was recorded between 2011 and 2013 before it shot again between 2013 and 2014. Also for foreign banks a further increase in ROA was observed in 2012 before it dropped slightly between 2012 and 2013 and picked up again between 2013 and 2014.

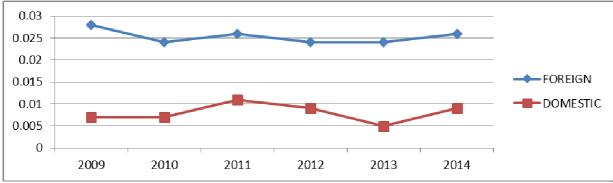


Figure 2: Performance of Banks measured by Returns on Assets in Tanzania during 2009-2014

5. Conclusions

This study aimed at conducting a comparative analysis of the financial performance of foreign owned banks and domestic banks operating in Tanzanian banking sector for the period between 2009-2016 using DuPont model. The model depicts that return on equity of banks is affected by three parameters namely; Profit margin (PM), Assets utilization AU and Equity Multiplier (EM).

The results of the analysis show that both returns on equity (ROE) and return on assets (ROA) of foreign banks are higher than those of the domestic banks. The higher ratios on ROA and ROE observed in foreign banks may have been caused by reported higher interest margin (PM), signifying a better cost management and use of large financial leverage by foreign banks.

The study also shows that foreign banks have higher average financial leverage ratios and average equity multiplier .This provides an insight that foreign banks have had higher level of risk than domestic bank and from a basic finance theory one may not get surprised why foreign banks were more profitable than domestic banks because the more risk you take you have to expect a corresponding level of returns.

Based on the results portrayed by this study we may conclude that foreign banks in Tanzania not only have higher return on assets ratio, but the high return on equity (ROE) ratio due to a larger use of financial leverage rather than the profitable use of assets. This implies that, compared to domestic banks, foreign banks manage their capital more efficiently than their domestic counterparts. Further study is recommended to look into details of factors which affect banks' Return on Assets and Return on Equity and also more research has to address the effect emergence of foreign banks on financial sector liquidity and risk taking behaviours.

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