“Local versus Foreign bank performance: the case study on Ghana”

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Michael Lawer Tetteh (Ghana)

Local versus foreign bank performance: the case of Ghana

Abstract

The purpose of this paper is to find the distinguishing characteristics and similarities, if any between foreign and local banks in Ghana and also to ascertain the firm-specific factors that contribute to the performance of these banks. The paired-sample t-test analysis is carried out to test the differences and similarities between the two categories of banks (local and domestic). Then, panel econometric technique is used to estimate the relationship between firm-specific characteristics and performance (i.e., return on assets) using an unbalanced publicly available data of 27 banks in Ghana between 2003 and 2012. Evidence indicates that both the local and foreign banks differ in terms of: profitability, size, interest income generation and revenue on commissions but similar on the following grounds: efficiency, market experience and knowledge and success in the market. Empirical results also indicate that market experience, size and ownership have significant negative impact on bank performance. On the other hand, success in the market as well as interest income is found to have a positive significant influence on bank performance. It is therefore, important for the banks to improve their efficiency and diversify their sources of income away from the heavy reliance on interest income.

Keywords: local and multinational firm, banking, performance, emerging market, Ghana.

JEL Classification: F23, F65.

Introduction

Recent performance and relative dominance of some emerging economies (e.g. China and India) have served as a catalyst for multinational firms to extend their operations to such destinations as well as use them as a launch pad to diversify their market and operational risks (Singh, 2012). Such actions do not only diversify risks, but also provide advantages for market expansion and enjoyment of economies of scale (Kathuria, 2013). Despite the existence of such opportunities in emerging markets such as Ghana, challenges do exist. Singh (2012) argues that such challenges emanate from a strategic positioning stand point by virtue of being a new entrant and also as a result of structural and infrastructural constraints on the new multinational. Notwithstanding, the arrival of foreign banks into the Ghanaian banking sector has increased over the past decade following the banking reforms. It is believed that entry barriers hinder the potentials of comparative advantage that foreign entrants bring to the fold (Sturm and Williams, 2009). Nonetheless, markets with high entry barriers are likely to attract the finest players into the market.

A cursory look at the Ghanaian banking market suggests that multinational subsidiary banks appear to settle into the Ghanaian market with “relative ease”. One reason the paper can assign to this has to do with the lack of competition among the domestic banks prior to the arrival of more multinational subsidiary banks into the country. In addition to this, the study can lay the supposed dormancy of the local rivals and the supposed superiority of the multinational banks to the technological and strategic inclination that they inherit from their parent companies. Miller and Eden (2006) are of the view that multinational firms (banks and other financial institutions in particular) should be able to transform the knowledge they have acquired operating in other countries easily to a new country setting. This further suggests why most of the multinational banks appear to be doing better than their local rivals. It by no means suggests that the host country banks are entirely underperforming.

However, the above point indicates that host countries face fierce competition from foreign banks and sometimes lose the race in specific areas such as technological and service portfolio innovation (Venaik et al., 2005). This sets the pace for the local rivals to follow (reactive approach). Others (example, Sturm and Williams, 2009) have also said that foreign banks are able to break or overcome the host country barriers as a result of some undisclosed advantages. The question however remains that with the persistent global competition for market share and performance, shouldn’t firms, banks in particular, focus on learning and innovation? Since these characteristics are seen as strategic postures that drive firm performance for both domestic and foreign companies? (Venaik et al., 2005). In the midst of all the rivalry in the sector, the population of banks in Ghana appears to be on the increase.

It has long been asserted (see Asheghian, 1982; Sturm and Williams, 2009) that foreign subsidiaries in a particular country (either developed or in the context of a developing country) perform better than their local counterparts. One close study to this current paper is Figueira et al. (2006) who studied ownership and efficiency of African banks. The study found that in situations where banks have more foreign ownership than local, they tend to outperform their domestic rivals. A similar though earlier study was conducted by Asheghian (1982). However, this was focused on the manufacturing sector. Though Figueira et al.’s study covered Ghana, it included only 16 banks. However, there are over 25 banks currently operating in Ghana with a substantial foreign presence. Another
similar study in the Ghanaian setting that compared the performance of domestic and joint venture companies (with large foreign control) was Damoah (2013). Damoah’s study also targeted the manufacturing sector of the economy.

Despite the enormous contributions to the literature, a gap exists in the area of comparing domestic and foreign bank performance and more so from an emerging market perspective. As one of the contributors to the literature notes, (see Berger, 2007), foreign banks in developing countries perform better than local peers. This current study also draws on a large data set covering a ten (10) year period from 2003-2012. It is the objective of this paper to investigate the factors that contribute to the differences in both local and foreign subsidiary banks and their performance as well as test the assertion that in developing countries, foreign banks perform better than their local peers. Based on the objectives of the paper, the following research questions have been outlined for empirical answers: (1) Are there any differences and similarities between local and foreign banks? If there are, what are they? (2) What firm-specific factors contribute to bank performance in Ghana?

The rest of the paper is outlined as follows: Section 1 reviews relevant literature to the subject matter. The paper then follows with the methodology. Section 2 discusses the empirical results. And final Section concludes the paper.

1. Literature review

1.1. Performance of foreign and local banks. There has been a growing literature in the field of multinational/foreign and domestic firm performance over the past decades (Asheghian, 1982; Venaik et al., 2005; Figueira et al., 2006; Berger, 2007; Sturm and Williams, 2009; Damoah, 2013). Nonetheless, majority of these studies have concentrated on the developed world. For example, Sturm and Williams (2009) studied the efficiency of banks in Australia. They found that foreign banks are more efficient in their resource usage as compared to their local counterparts. The question then is why foreign counterparts who supposedly have relatively less knowledge about the local market tend to perform better than their local peers who are expected to ‘know better’ after several years in operation? It is interesting to find that some subsidiary entrants pose more strategic and valuable information relative to similar existing firms about the market they are entering therefore giving them a competitive advantage (Fang et al., 2007).

It is thought-provoking to note the prevalence of foreign firms dominance over their host country counterparts. In a recent study, Pehrsson and Pehrsson (2014) describe the genesis of such a phenomenon to be as a result of value-adding activities. According to them, these activities are associated with the corporate strategy manifested by market knowledge transferred from their parent companies.

It is also seen as the subsidiary’s own knowledge of obstacles that hinder progress in the host country as it is possible for multinational company (MNC) subsidiaries to learn innovative ideas from the host-country market (Phene and Almeida, 2008). Some other reasons that have been assigned to this phenomenon are also based on the efficiency of resource usage, labor productivity, and capital productivity among others (Asheghian, 1982). According to Damoah (2013), productive efficiencies give competitive advantages to a firm amongst its rivals. It is therefore not surprising that empirical findings have posted similar results in the past (see e.g. William- son, 1977). Rationally, it is expected that domestic banks should be able to have a comparative advantage over their foreign rivals. However, as the literature suggests (Sturm and Williams, 2009; Figueira et al. 2006; Asheghian, 1982), this does not happen often if ever. As clearly indicated by Sturm and Williams (2009), even in the US setting, MNC subsidiary banks are better at putting their physical factors of production to judicious use. They are also more efficient at generating revenue as compared to their domestic rivals.

In particular, such happenings could be as a result of industry variables: superiority in advanced technology, access to capital, and the competitive advantage in utilizing available resources in an effective manner. It is evident so far that firms that effectively use their firm specific resources to their best advantage are able to do better in their specific industry setting and could capitalize on it to fetch “economic rent” in the international arena (Rugman and Verbeke, 1990). Hulbert et al. (1980) also express the view that strong planning and strategic marketing plan formulation goes a long way to affect foreign firm/subsidiary performance. Does it mean then, that local peers plan less? Could it also be that in emerging markets, there is a scarcity of well-trained managers to strategically plan since such strategic plans are mostly set at the top management level?

Studying the performance of joint venture manufacturing and wholly owned indigenous manufacturing firms in Ghana between 1991 and 2002, Damoah (2013) found that joint venture firms perform better than their wholly owned indigenous Ghanaian peers. Some of the strategic factors that showed significant importance to the study include: firm size, workforce productivity and the location where a firm operates. Others have also attributed this trend to successful and careful utilization of knowledge transfer from the parent company (Fang et al., 2007).
1.2. Methodology and data. The pooled data methodology was applied to the study to capture the set of banks over the ten year (2003-2012) study period of the paper. The panel regression model is specified in equation 1 below. Performance was assessed using the return on assets (ROA) ratio of the banks over the ten year study period.

\[ \text{ROA}_i = \beta_0 + \beta_1 X_{it} + \lambda_t + \epsilon_{its} \]  

(1)

where \( \text{ROA}_i \) denotes performance of firm \( i \) at time \( t \), \( \beta_0 \) is the intercept, \( X_{it} \) is a vector matrix of regressors and, \( \beta_0 \) is a matrix of coefficients. The vector matrixes are shown below \( \lambda_t \) is the unobservable individual time effects; and \( \epsilon_{its} \) is the error term.

\[ X_a = \begin{bmatrix} \text{CIR} \\ \text{SUCCE} \\ \text{SIZE} \\ \text{INTICOMM} \\ \text{COMM} \\ \text{EXP} \\ \text{OWN} \end{bmatrix}, \]

(2)

\[ \beta_{its} = \begin{bmatrix} \beta_1 \\ \beta_2 \\ \beta_3 \\ \beta_4 \\ \beta_5 \\ \beta_6 \\ \beta_7 \end{bmatrix}, \]

(3)

Data for the study were drawn mainly from the annual audited financial reports and statements of the banks. The annual banking survey bulletin by PricewaterhouseCoopers International (PWC), Ghana also proved to be very resourceful for portions of the financial data particularly the share of industry operating assets. In all, twenty seven (27) banks from 2003 to 2012 were studied. This resulted in an unbalanced panel total observation of 208. All the sources of the data are publicly available.

1.3. Description of variables. 1.3.1. Profitability. Firm performance indicators have been widely utilized and mentioned in the finance literature. Some of the most popular ones are accounting measures such as: Return on Assets (ROA); Return on Equity (ROE); Return on Investments (ROI); market share; sales or sales growth among others (Miller and Eden, 2006). Following Miller and Eden (2006), the study measured the profitability of the firms by using the return on assets (ROA) as proxy for firm performance.

1.3.2. Cost efficiency. Workplace productivity is seen as one of the significant impetus for firm growth and performance (Damoah, 2013) and measuring productivity is crucial to business management as well as service capability (Burger and Moormann, 2008, p. 86). If managed well, productivity has a high propensity to reduce waste in the organization thereby reducing overall operating expenditure hence giving rise to competitive advantage and more efficiency in terms of resource usage over rival parties in the same industry (Asheghian, 1982; Sturm and Williams, 2009; Damoah, 2013). Damoah (2013) utilized the output per employee (output over number of employees) (pp. 271) in his study. However, in this current study, productivity and efficiency in banks is measured by the cost income ratio (CIR) following Burger and Moormann (2008). It is given as the ratio of operating cost to operating income (Burger and Moormann, 2008). High CIR means low productivity and low efficiency and the inverse is also true. Operationally, it means CIR shows how much cedis is needed to generate one cedi in revenue. Asheghian (1982) concludes that firms with foreign inclusion are more efficient and productive than their wholly owned local competitors. The paper can therefore envisage that the foreign owned banks will be more productive and efficient than their local counterparts.

1.3.3. Revenue generation efficiency. Berger and Humphrey (1992) observe that bank assets (mostly made up of loans) possess some output characteristics because they are those that generate the largest portion of revenue to banks. A review of the income generation stream of banks in Ghana over the past years proves the same (Bank of Ghana Monetary Policy Report, 2014, p. 15). Furthermore, an efficient management of this goes a long way to strategically, and competitively position a bank over its peers in the industry. In light of this and following the indication of loans and advances forming the significant portion of bank assets and subsequently revenue generation, the paper looks at the interest income of the banks to generate additional revenue form their operations aside the traditional interest income. This considered fees, commissions and other dividends from their operational activities. Sturm and Williams (2009) noted that both domestic and foreign subsidiary banks have the tendency to be very efficient when it comes to revenue generation. Hence, it will be difficult to say at this point which category of bank (either local or foreign) is likely to be more efficient in this income generation scope. In addition, the study tested the technical skills of the banks to generate additional revenue form their operations aside the traditional interest income. This considered fees, commissions and other dividends from their operational activities. Sturm and Williams (2009) noted that both domestic and foreign subsidiary banks have the tendency to be very efficient when it comes to revenue generation. Hence, it will be difficult to say at this point which category of bank (either local or foreign) is likely to be more efficient in this income generation scope.
experience is gained by the firm, it would be able to compete efficiently against rivals. Miller and Eden (2006) assert that, in markets where firms, especially banks, and other financial institutions are able to transfer knowledge and translate it into performance over a shorter period, the better. Therefore, the paper expects a-priori, that local firms should be more experienced than their foreign counterparts. This is measured by the logarithmic transformation of the number of years in operation (Fang et al., 2007).

1.3.5. Success in the market. A cursory look at the Ghanaian banking sector gives an indication of keen competition for market share. The paper therefore looks into the market success of the banks operating in the country. Similar to Nguyen (2011), the paper utilized the respective market share of the banks as a proxy for success in the banking industry. In particular, the current paper utilized the share of bank industry operating assets since investment in such assets can be essential for business success. The category of bank with the highest share can be described to have the market power. It is thus expected that domestic banks would be more successful in this regard than their subsidiary counterparts.

1.3.6. Size. Firm size is seen as a key determining factor in firm performance though its relationship with performance is mixed. It is also seen as a specific advantage that companies can leverage on to compete in their respective market (Nguyen, 2011). It’s even asserted in some quarters (Becker et al., 1998 for instance) that its inclusion serves as a replacement for several variables that could have been entered into the model. The logarithm of total assets of the banks is used as a proxy for firm size. All the above variables and their measurement have been summarized in Table 1 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Symbol</th>
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<tbody>
<tr>
<td>Profitability</td>
<td>EBIT/Total Assets</td>
<td>ROA</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Operating cost or expenditure/Operating income</td>
<td>CIR</td>
</tr>
<tr>
<td>Market experience &amp; knowledge</td>
<td>Log of number of years in operation</td>
<td>EXP</td>
</tr>
<tr>
<td>Revenue generation efficiency</td>
<td>Interest Income/Commissions and fees</td>
<td>INTI, COMM</td>
</tr>
<tr>
<td>Success in the market</td>
<td>Market share of industry total operating assets</td>
<td>SUCC</td>
</tr>
<tr>
<td>Size</td>
<td>Log of total assets</td>
<td>SIZE</td>
</tr>
<tr>
<td>Ownership</td>
<td>1 = domestic bank; 0 = foreign owned</td>
<td>OWN</td>
</tr>
</tbody>
</table>

2. Presentation of results

2.1. Descriptive statistics. In order to ascertain the differences/similarities between the two categories of banks, the study utilized the paired-sample t-test analysis. The paper thus tests the following hypothesis: $H_0 : \overline{X}_{id} = \overline{X}_{if}$; $H_1 : \overline{X}_{id} \neq \overline{X}_{if}$, where $\overline{X}_{id}$ is the mean of the $i$th indicator variable for the local banks and $\overline{X}_{if}$ is the mean of the $i$th indicator variable for the foreign banks. The test result is shown in Table 2 below. From the Table, it can be observed that there are significant differences between the domestic and foreign banks when compared on the level of ROA, SIZE, INTI, and COMM. However, there is no statistical evidence to support the hypothesis that the banks are different when compared on the level of CIR, SUCC and EXP. Specifically, the paper finds at the 10-percent significance level that the banks differ in terms of profitability. In particular, it is revealed that the foreign banks performed better than their domestic counterparts as shown by the respective mean scores. The CIR in particular corroborates the view of Asheghian (1982). This interesting revelation points to the fact that, there is a level playing field for all banks to operate without any undue advantages to domestic banks against their foreign rivals. This implies that the responsibility for performance lies solely on the individual banks to harness and utilize their assets well to generate enough revenue. This, I think has been the hallmark of the foreign banks hence the current result. Perhaps because of their status and the ideology of being in a foreign market, they are very innovative when it comes to asset utilization to generate enough revenue. Another area of significant difference between the banks has to do with their size. It is evident at the 5-percent significance level that the foreign banks are significantly bigger in size than their local peers. In a similar instance, a significant difference was realized in the interest income component of the banks at the 5-percent significance level. A look at the Table once more indicates that the multinational subsidiary banks received more interest income (INTI) over the study period as compared to the domestic banks. It therefore suggests that either the subsidiary banks give out more credit facilities than their local counterparts or charge high interest on credit to offset the price of high non-performing loans or as a result of high operational cost. Any or all of these could have accounted for the high interest income recorded by the banks. Aside interest income, one of the avenues through which banks generate income is through commission (COMM), fees and other charges. The paper finds that the foreign banks generate more revenue in the form of commissions than the local banks. More so, the difference between them is statistically significant at the 1-percent significance level. In corroboration with Berger (2007) and Sturm and Williams (2009), the paper finds that the foreign banks performed better than their local counterparts at all the various performance levels. The intercorrelation between these variables described thus far is discussed next.
2.2. Correlation analysis. Table 3 presents the correlation matrix of all the variables included in the estimation model. It can be observed from the table that all the regressors have a negative effect on ROA except SUCC, INTI and COMM. It is also noticeable that all the positively correlated variables are statistically significant at 10-percent (SUCC) and at 1-percent significant levels (INTI and COMM). It is important at this stage to look out for possible multicollinearity problems among the predictor variables. A cursory look at the Table indicates that all the variables have lower intercorrelation except those between: EXP and SUCC (75.92%) as well as INTI and COMM (72.77%). Though these correlations might appear to be high, they are not so high to warrant the removal of any of them. Moreover, their inclusion did not affect the performance of the estimation model as can be observed from the lower standard errors and the high Wald chi statistic in Table 4.

2.3. Estimation results. The estimation result of the study is shown in Table 4 below. The outcome of the study shows that experience in the market has a negative significant effect on ROA at the 1-percent significance level. What this means is that, as the banks grow older and gain more experience, their profit margins drop. Some of the possible factors to this revelation could be the lack of innovation and complacency on the side of the older banks. Because, per the results, it appears that as the banks become established and gain enough grounds, they tend to lose sight of winning more profitable customers and are unable to pay close attention to the things that aided in their rise. Such flaws are also signs of inefficiency. Perhaps, it could be that majority of the banks are at the maturity phase of their life cycle and as such, high expenditures on advertising and promotions have had little or no result on demand resulting in their poor performance. It is also possible that the banks are at the decline stage of their life cycle as stiffer competition from relatively younger banks with newer and innovative products tends to take the shine out of the products of the older banks.

Similar to Shin and Kim (2011), INTI was found to have a positive significant relationship with ROA at the 1-percent significance level. This means that banks in Ghana rely heavily on interest income as their primary source of revenue. Thus income diversification or non-interest income streams such as fee-based earnings in the form of commissions from investment consulting among other sources appear to be far from near. It is therefore, not surprising to realize an insignificant effect of commission on ROA. Findings of the paper also suggest that the successful banks in the industry are able to ride on their operating share advantage to significantly earn profit ($0.002 < 0.01$). It is generally envisaged that bigger sized firms should be able to capitalize on their size to enjoy some economies of scale and maintain a substantial level of advantage over relatively smaller firms. However, this current paper finds that as the banks grow in size, their
ROA is significantly affected in a negative light. One reason that could have accounted for this is the cost associated with effectively monitoring assets as they grow in size. Another probable reason is the increase in loans and other credit lines to customers and the seemingly increasing non-performing loans. It is worth noting also that the acquisition of unproductive assets by the banks could have been a significant contributor to this present outcome. Furthermore, the paper finds that ownership has a negative significant effect on ROA at the 5-percent significance level. This means that Ghanaian owned banks under performed over the study period as compared to their foreign counterparts. It implies that the foreign banks are able to overcome all the challenges associated with multinationals in a particular host country. It could also largely be as a result of the liberalization and deregulation of the Ghanaian banking sector that give equal opportunities for competition. The result of the current study therefore, defeats the common assertion that home country firms perform better than their foreign rivals in the same sector. Probably, what could have accounted for this is the ability of multinational subsidiaries to acquire enough knowledge and technical expertise from their parent companies and further operationalize them locally or through their firm-level innovative activities.

Table 4. Random effects estimation results

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>z</th>
<th>P &gt;</th>
<th>z</th>
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<tr>
<td>CIR</td>
<td>0.0018662</td>
<td>0.0090078</td>
<td>0.21</td>
<td>0.836</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUCC</td>
<td>1.585376</td>
<td>0.594998</td>
<td>3.14</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.5998639</td>
<td>0.1570230</td>
<td>-3.76</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTI</td>
<td>0.6085853</td>
<td>0.1617761</td>
<td>3.76</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM</td>
<td>0.094343</td>
<td>0.1424639</td>
<td>0.07</td>
<td>0.947</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP</td>
<td>-0.0654737</td>
<td>0.0180794</td>
<td>-3.62</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWN</td>
<td>-1.625153</td>
<td>0.7097301</td>
<td>-2.29</td>
<td>0.022</td>
<td></td>
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</tbody>
</table>

Note: dependent variable is ROA.

Conclusion

The purpose of this study is to conduct a comparative analysis of the performance of domestic and foreign banks in Ghana. Using a set of key firm specific performance indicators, it was found that the banks are statistically different in terms of profitability, size, interest income generation and revenue on commissions. More so, in all these cases, the foreign banks were found to perform better than their local peers. On the other hand, insignificant differences were found between the banks on the level of: cost efficiency and market experience and knowledge. Despite the insignificant differences, the foreign banks again appeared to have an upper-hand in all these areas. It was further evident from the empirical estimation that industry experience does not necessarily lead to better performance and so is bank size. Success is however a key driver of bank performance. In a broader spectrum, the paper shown that the foreign owned banks perform better and are more efficient than their local counterparts and so rejected the host country advantage ideology. This outcome send the signal that performance in a liberalized market can no longer be tied tightly on experience and home advantage but could rest on the door step of strategic positioning and knowledge of that market. Finally, while interest income continues to remain one of the most significant contributors to bank profitability in Ghana, income on commissions and other fees are not. Outcomes like the one from this paper reiterate the need for practitioners to diffuse the concentration of bank revenue on interest income. This is one key area for the leadership of these banks to address as it stands the chance of posing a serious threat to the sector in terms of sustainability and credit risk. It is further recommended that the banks must begin to realize the need for a paradigm shift from inefficient operations to the realm of innovative banking as the way forward for greater profitability in the present era. Due to data limitations, the author could not take some important firm-specific factors into consideration such as research and development (R&D) when the two categories of banks were compared. The current paper utilized the cost-income ratio as a measure of bank efficiency. Following the growing trend and strength in nonparametric analysis, future research could employ the Data Envelopment Analysis approach to capture the efficiency of banks.
References