International Journal of Business and Management; Vol. 11, No. 7; 2016
ISSN 1833-3850 E-ISSN 1833-8119
Published by Canadian Center of Science and Education

Relating Cost Efficiency and Profitability of Merged Firms in the Kenyan Financial Services Industry

Agnes Ogada, George Achoki[1] & Amos Njuguna[1]

[1] Chandaria School of Business, Nairobi, Kenya

Correspondence: Agnes Ogada, Chandaria School of Business, P.O Box 14634-0800 Nairobi, Kenya. E-mail: owuorogada@gmail.com

Received: March 30, 2016 Accepted: May 19, 2016 Online Published: June 18, 2016

doi:10.5539/ijbm.v11n7p138 URL: http://dx.doi.org/10.5539/ijbm.v11n7p138

Abstract

Theory holds that firms merge to benefit from economies of scale, diversification and synergy, which are realized through cost efficiency. Empirical studies on the other hand report mixed findings with regard to the theoretical underpinnings given the changing financial and technological environment. This paper sought to determine the cost efficiency ratios of merged firms in the Kenyan financial services industry and establish the effect that those ratios have on profitability (inferred using the rates of return on assets and equity). Using a mixed research design, pre and post-merger secondary data was collected from 41 firms in the Kenyan financial services industry that had concluded their merger processes by 31 December 2013. Primary data was used to explain the results of the secondary data. Panel data analysis was used to determine the change in the study variables and trends over between 2009 and 2013, event window (pre-merger and post-merger) analysis was used to test the difference in cost efficiency means before and after the merger while regression analysis was used to determine the relationship between cost efficiency and profitability. Results indicate that cost efficiency improved after merger and resulted to the growth in the rate of return on assets and equity, which was attributed to the efficiency in the use of labour, financial resources and managerial effort.

Keywords: mergers and acquisitions, cost efficiency, ROA, ROE, financial institutions

1. Introduction

Mergers & Acquisitions (M&A) play a major role in shaping business activities globally, once a phenomenon documented in the US. Continental Europe has experienced M&A bursts with relative inactivity both domestically and across national borders since the stock market bull run from the recession of 1980- 81, deregulation of the financial services sector, and development of new financial instruments and markets (Hitt, Harrison & Ireland, 2001). In the UK, the first wave of M&A activities were noted in the 1920's and was attributed to need for mass production, while the second M &As wave came in the 1960s as a response to the internationalization of the world economy (Sudarsanam, 2003). Since then, M&A activities have increased significantly, for instance Marks & Mirvis (2010) report that global value of M&A rose from $462 billion in 1990 to more than $4.6 trillion in 2007 slowing down in the next two years following the global financial meltdown.

In Africa, M&A deals have allowed companies to consolidate their positions in African markets, contributing to better market access and competitiveness. Nevertheless, the African M&A market is small compared to other regions in the world (DiGeorgio, 2002). There are also regional disparities within the continent as the market is essentially dominated by deals in Northern and Southern Africa. Despite the impact of the ongoing recession on M&A markets worldwide, M&A activities in emerging markets especially in Africa have showed resilience and their slowdown has been tempered. The attractiveness of the African continent for M&A deals is mainly underpinned by the high economic growth and the buoyant energy, mining and utilities sectors. Investors and analysts are expecting that the spike in M&A deals across the continent will continue a historic upward trend (DiGeorgio, 2002).

In Kenya Mergers and Acquisitions are regulated by The Restrictive Trade Practices, Monopolies and Price Control Act (Cap 504 Laws of Kenya). M&A deals in Kenya slowed down in the first four months of 2015 compared to a 2014 despite the multi-billion shilling Equity and Centum share deals. Data compiled by advisory firm Burbidge Capital on corporate deals in East Africa shows that in 2015, there were 11 M&A deals compared

to 17 in the first four months of 2014. In terms of sectors, the financial services sector led with 10.4 per cent of the total deals, followed by manufacturing with 8.3 per cent, real estate and oil with 2.8 per cent each (Mwaniki, 2015). Kenya has kept its position as the leading M&A hotspot in East Africa. Analysts are predicting that the insurance sector remains the likeliest focus area for mergers and acquisitions post 2015 due to its high growth potential as well as the higher capital demands. Banking sector could also provide a growth area in M&A in future, with the country seen as having too many banks (43) which makes it difficult for any single lender to take on financing of large-scale projects due to capital constraint (Mwaniki, 2015).

Efficiency is a value-maximizing motive in mergers due to gains that can be realized through cost savings from removal of overlapping operations, streamlining of back office functions, labour reductions, and so on (Heffernan, 2013). Efficiency ranks high as a motive for value maximization in financial institutions mergers, considering the potential benefits that can be derived from economies of scale and scope, risk reduction by product and geographical diversification, and taxation (Vander, 2011). Efficiency gains can be achieved in both domestic and cross border mergers where bidder and target are of equal size. Cost efficiency gains from merger may arise from the fact that merged financial institutions gain access to cost saving technologies or spread their fixed cost over a larger base, thus reducing average cost (Frei & Harker, 2012), which depend on the type of merger and acquisition, the motivation behind it and the manner in which the management implement its plans.

Limited studies have been carried out on the M & A in the Kenyan market. These studies' findings have not shown that M & A activities positively affect financial performance. Some of them even give contradictory findings. Chesang (2002) studied implications of merger restructuring on performance of commercial banks in Kenya and using ratio analysis she concluded that although there was improved performance in some cases, the extent of the contribution was not significant. Korir (2006) studied merger effects of companies listed in the Nairobi Securities Exchange (NSE) and concluded that mergers improve performance of companies listed at the NSE. Ochieng (2006) showed results that indicated a decline in earnings and lower ratios when CBA merged with FABK. Marangu (2007) studied effects of mergers on financial performance of non-listed banks in Kenya from 1994-2001 and results of ratio analysis concluded that there was significant improvement in performance for the non-listed banks which merged compared to the non-listed banks that did not merge within the same period. Lack of conclusiveness of studies linking M & A activities to performance is the first distinct knowledge gap. Additionally, empirical studies conducted in Kenya including (Maranga, 2010; Katuu, 2003; Muya, 2006; Kiplagat, 2006; Wesonga, 2006; Nyagah, 2007; Njoroge, 2007; Kithinji, 2007, Ndura 2010, Ndung'u 2011, Ireri, 2011) have failed to treat mergers and acquisitions as a strategic activity. In view of these inconclusiveness and conceptual gaps, this study closes the gap by reviewing the cost efficiency of the merged financial institutions and its effect on profitability.

2. Theoretical Framework

The two leading M&A efficiency theories are disciplinary and synergistic merger theories. Disciplinary theory suggests that M&A are used to discipline target firms' managers who pursue other objectives than profit maximization. The difference in focus is at the expense of operating efficiency therefore negatively affects the firm's performance (Weston, Chung, & Hoag, 2003). Opportunistic buyers notice poorly performing plants that are economically feasible and discipline these plant managers by acquiring them. The suggestion here is that acquiring firms merge with poorly performing targets to improve their performance by helping them realize the target assets' full potential. The synergistic merger theory on the other hand postulates that firm managers achieve efficiency gains by combining an efficient target with their business to improve the target's performance (Weston et al., 2003). Efficiency theories thus suggests that despite M&A deals, firms may still operate below their potential as a result of wrong or overoptimistic premises made by the acquirers before acquisition especially with regard to capacity decisions. As a result the acquirer pays an "inefficient" premium for a firm that is not likely to change its fortunes in the long-term. To address the shortcomings, the acquiring firms would have to replace inefficient managers in the target or operate the merged firm as a subsidiary (Weston et al, 2003). Consistent with this theory, this study postulates (i) an increased in cost efficiency of firms after merger and (ii) a positive relationship between the cost efficiency ratio and the rates of return on assets and equity.

3. Research Methodology

A mixed research design was adopted for the study. Quantitative data from the audited financial statements of the firms was used to determine the cost efficiency (cost to income ratio), return on assets and return on equity ratios of the sampled firms before and after the merger while qualitative data was used to explain the results. The population consisted of 51 firms drawn from both the insurance and banking industries in Kenya by 31 December 2013. Ten firms were omitted from the sample as a result of missing data; hence conclusions and

inferences were based on 41 firms. Primary data was collected using a self-constructed questionnaire administered on random basis to 120 managers in the merged firms (response rate was 69%; n=83). Panel data was generated by pooling time-series observations across merged financial institutions. Event window methodology which consisted of pre and post analysis was also used to gauge the mean performance before and after the merger as a result of cost efficiency. The regression analysis model was used to test the relationship between the dependent and independent variables.

4. Findings

4.1 Financial Data of the Sample

4.1.1 Cost efficiency

Results in Table 1 indicate that the mean cost efficiency ratio for the period 2009 to 2013 was 79%, with the minimum and maximum observations being 76% and 82% respectively. Average standard deviation of 21% is observed with the minimum and maximum values being 13% and 40% respectively.

Table 1. Cost efficiency ratios

Variable	Year	Observations	Mean	Std. Dev.	Min	Max
Cost Efficiency	2009	41	0.757899	0.179707	0.270796	1.257062
	2010	42	0.784002	0.134971	0.3	1.123967
	2011	42	0.799495	0.179594	0.346275	1.772502
	2012	43	0.822439	0.400536	0.32	2.743182
	2013	43	0.787736	0.195874	0.317757	1.752603
Average			**0.79031**	**0.21814**		

Results of the event window analysis testing the difference in cost efficiency before and after merger, shown in table 2 point to a significant statistical difference in cost efficiency mean before and after the mergers.

Table 2. Cost efficiency pre and post-merger analysis

	Merger period	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Cost efficiency	1	23	0.408696	0.100738	0.021005	-12.026**	0.000
	0	45	0.763556	0.121677	0.018139		

** p<0.01.

4.1.2 Return on Assets (ROA)

As indicated in table 3 the average ROA for the period 2009 to 2013 was 18% with average standard deviation of 97%. The minimum and maximum observed values were 3.1% and 35.2% respectively with standard deviation ranging from 4.5% to 1.97%. Notably, the ROA decreased sharply in 2012 and 2013.

Table 3. Return on assets

Variable	Year	Observations	Mean	Std. Dev.	Min	Max
ROA	2009	41	0.185122	1.021311	-0.16	6.56
	2010	42	0.195714	1.038085	-0.1	6.76
	2011	42	0.351667	1.973464	-0.22	12.83
	2012	43	0.16	0.779741	-0.15	5.14
	2013	43	0.030698	0.045846	-0.16	0.09
	Average		**0.18464**	**0.97169**		

4.1.3 Return on Equity (ROE)

Table 4 shows that the average ROE for the study period was 14.4% with the observed minimum and maximum ratios being 11.5% and 17% respectively. The mean standard deviation observed was 6.8% with minimum and maximum indices of 3.7% and 10% respectively.

Table 4. Return on equity

Variable	Year	Observations	Mean	Std. Dev.	Min	Max
ROE	2009	41	0.14317	0.0526	0.05	0.31
	2010	42	0.11524	0.04748	0.05	0.26
	2011	42	0.16833	0.10613	0.05	0.46
	2012	43	0.1693	0.09767	0.05	0.47
	2013	43	0.12372	0.03786	0.06	0.19
	Average		**0.14395**	**0.06835**		

4.2 Effect of Cost Efficiency on Profitability

4.2.1 Effect of Cost Efficiency on ROA and ROE

Table 5 presents the results of the correlation analysis between cost efficiency, ROA and ROE. The results show that ROA and cost efficiency (cost income ratio) are negatively and significantly correlated ($r=0.162$, $p<0.05$).

Table 5: Correlation analysis between cost efficiency, ROA and ROE

		ROA	ROE	Cost efficiency
ROA	Pearson Correlation	1	.410**	-.162*
	Sig. (2-tailed)		0.00	0.019
ROE	Pearson Correlation	.410**	1	-0.088
	Sig. (2-tailed)	0.00		0.205
Cost efficiency	Pearson Correlation	-.162*	-0.088	1
	Sig. (2-tailed)	0.019	0.205	

* $p<0.05$; ** $p<0.01$.

Regression results in table 6 show that the relationship between cost efficiency and ROA is negative and significant ($b_1=-0.778$) and $p<0.05$ while that of the ROE is negative but not significant ($b2=-0.208$) $p>0.05$. The goodness of fit of the two models are reported as; 26% for ROA and 0.8% for ROE. Notably, the overall model of ROA is significant with an F statistic of 7.139.

Table 6. Regression analysis for cost efficiency, ROA and ROE

	ROA	ROE
Parameter estimate	Coefficient(P value)	Coefficient(P value)
Constant	.799 (0.004)	.166**(0.000)
Cost Efficiency	-.778(0.019)	-0.208(0.205)
R Squared	0.26	0.008
F statistic (ANOVA)	7.139(0.019)	0.009(0.205)

Note. ** $p<0.001$.

5. Discussion of Results

The analysis of secondary data has disclosed a cost efficiency ratio of 79%. The results of the primary (63% of the respondents) attributed this to the cautions taken after the merger and the new targets set to increase profitability in addition to less costs to generate greater output (63% of respondents), effective use of man power (57%), efficient use of financial resources (53%) and optimal use of managerial effort (50%) The same observations could be used to explain the fact that cost efficiency improved significantly after the merger.

Additional results indicate that the return on assets increased significantly despite the decrease in 2013, which primary respondents attributed to external factors, primarily unprecedented increase in interest rates and depreciation of the Kenyan shilling. The negative results between ROA and ROE on one hand and cost efficiency on the other.

Relating the results to the efficiency theory of M&A expounded by Weston *et al* (2003), we conclude that the synergetic view better explains the situation with Kenyan financial service firms that have undertaken M&A.

The secondary results and consequent triangulation with primary data shows that the managers in this industry achieve efficiency gains by combining an efficient target with their business to improve the overall performance of the firm.

6. Conclusions

This study has made important contributions to the existing theory; *first* it has grounded the application of the efficiency theory in M&A, *secondly,* it has established a significant relationship between cost efficiency and financial performance of merged institutions leading to the conclusion that a high degree of cost efficiency improves the return on assets and equity. *Lastly,* the study has established the reasons for the existence of the synergies as; caution in evaluating the target in an M&A deal, effective use of manpower after merger, efficient use of financial resources and optimal use of managerial effort.

7. Recommendations and Suggestions for Further Research

Given that the drivers of cost efficiency and consequent ROA and ROE, merging firms in the financial services industry are urged to; carefully evaluate their targets before merger, harness the use of labour after merger – a plan that might even involve removal of managers who may not seem keen on achieving the objectives of the merged firm, undertake careful cost benefit analysis for any investments and finance decisions they take and ensure that their managers are effectively used in the service of the organization.

Emanating from the findings of this study, we recommend that future researchers focus their research efforts on *first,* other factors that explain the success of M&A in the Kenyan financial services industry as this study focused exclusively on cost efficiency, *secondly,* factors responsible for the prediction of ROA and ROE in a merged financial institution given that cost efficiency only explains 26% and 0.8% of the changes in the two variables respectively and *lastly,* replicate the study in other industries.

References

Chesang, C. J. (2002). *Merger Restructuring and Financial Performance of Commercial Banks in Kenya*. Unpublished Dissertation, School of Business, University of Nairobi.

DiGeorgio, R. M. (2002). Making mergers and acquisitions work: What we know and don't know. *Journal of Change Management, 3*(2), 134-148. http://dx.doi.org/10.1080/714042529

Frei, F., & Harker, P. (2012). Measuring the Efficiency of Service Delivery Processes: With Applications to Retail Banking. *Working Paper* No. 96-31. Wharton Financial Institutions

Hefferna, D. S. (2013). Have Supermarket Mergers Raised Prices? An Event Study Analysis. *International Journal of the Economics of Business*.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. (2001). *Mergers and Acquisitions: A Guide to Creating Value for Stakeholders*. Oxford: Oxford University Press.

Ireri, J. K. (2011). *Effects of mergers and acquisitions on financial performance of oil companies in Kenya*. Unpublished Dissertation, School of Business, University of Nairobi

Katuu, J. M. (2003). *A survey of Factors Considered Important in Merger & Acquisition Decisions by Selected Kenyan Based Firms*. Unpublished Dissertation, School of Business, University of Nairobi

Kiplagat, E. (2006). *Effects of Mergers on Financial Performance of Companies Listed at the NSE.* Unpublished Dissertation, School of Business, University of Nairobi

Kithinji, M. (2007). *Effects of Mergers on Financial Performance of Non Listed Banks in Kenya.* Unpublished Dissertation, School of Business, University of Nairobi

Korir, P. (2006). *Merger effects of companies listed in the NSE*. An unpublished MBA project, University of Nairobi

Maranga, C. (2010). *Effects of mergers and acquisitions on cost and scale efficiency of the combined commercial banks in Kenya*. Unpublished Dissertation, School of Business, University of Nairobi

Marangu, K. (2007). *Effects of mergers on financial performance of non-listed banks in Kenya* (Doctoral dissertation, University of Nairobi).

Marks, M. L., & Mirvis, P. H. (2010). *Joining Forces: Making One Plus One Equal Three in Mergers, Acquisitions and Alliances*. Jossey Bass.

Muya, C. M. (2006). *A Survey of Experiences of Mergers*. Unpublished Dissertation, School of Business, University of Nairobi.

Mwaniki, C. (2015). *Kenya's merger, acquisition deals slow -down in 2015*. Business Daily. P

Ndung'u, B. M. (2011). *Effects of mergers and acquisitions on the financial performance of commercial banks in Kenya*. Unpublished Dissertation, School of Business, University of Nairobi

Ndura, K. M. (2010). *Effects of mergers on financial performance of insurance companies in Kenya.* Unpublished Dissertation, School of Business, University of Nairobi

Njoroge, F. W. (2007). *A Survey of Mergers & Acquisitions Experiences by Commercial Banks in Kenya.* Unpublished Dissertation, School of Business, University of Nairobi

Nyagah, B. W. (2007). *Doctor's perception of mergers & acquisitions in the pharmaceutical industry in Kenya.* Unpublished Dissertation, School of Business, University of Nairobi

Ochieng, A. (2006). Bank consolidations and competition the issue of Kenya's many small banks, *Marketing Intelligence Banking Industry Survey,* 18-24

Sudarsanam, S. (2003). *Creating Value from Mergers and Acquisitions-The Challenges*. Pearson Education Group, Essex.

Vander Vennet, R. (2011). The effect of mergers and acquisition on the efficiency and profitability of EC credit institutions. *Journal of Banking and Finance, 20*(9), 1531-1558. http://dx.doi.org/10.1016/S0378-4266(96)00014-3

Wesonga, M. (2006). *A Survey of the Factors that Determine the Choice of Mergers & Acquisition Partners in Kenya.* Unpublished Dissertation, School of Business, University of Nairobi.

Weston, J. F., Chung K. S., & Hoag, S. E. (2003). *Mergers, Restructuring, and Corporate Control*. Prentice Hall, Inc., Englewood Cliffs, New Jersey.