Mergers and Acquisitions: Effects on Shareholders Value Evidence from Nigeria

Omah .I. PhD
Department of Accounting and Finance
Faculty of Management Sciences
Lagos State University
Nigeria

Okolie J.U PhD
Department of Accounting and Finance
Faculty of Management Sciences
Lagos State University
Nigeria

Dr. (Mrs). Durowoju S.T. PhD
Department of Business Administration
Faculty of Management Sciences
Lagos State University
Nigeria

Abstract

During the last decade, Nigeria has witnessed significant growth in corporate mergers and acquisitions. Reasons behind mergers and acquisitions are to syntheses and enhance the corporate tenacity (synergy). In the existing study, an attempt has been on the study of the impact of mergers and acquisitions on the shareholders wealth. The study specifically on companies which have undergone merger during the period 2001 to 2010. There are about 20 consolidated banking industries in Nigeria during the above mentioned period and we have considered all for the study to examine pre and post merger and acquisition performance of the specified banks. The result suggested that shareholders value creation is highly dependent on operating expenses, profit margin, return on Capital Employed (TOCE) and Expenses ratio. The inter-company and intra-industry analysis results indicate that there is marginal positive impact of mergers and acquisitions on shareholders value creation.

Key Words: Monopolies and Restrictive Trade Practice, (MRTP)**,** Mergers & Acquisitions (M & A)**,** Economic – Value-Added (MVA)**,** Return on Capital Employed (ROCE)**,** Return on Net Worth (RONW)**,** Centre of Monitoring Nigerian Economy (CMNE)

Introduction

The main objective behind the corporate restructuring in Nigeria has been the policy changes involving economic reforms, which favours the reduction in the number of voluminous banking houses, removal of restrictions on corporate investments and growth contained in the Monopolies and Restrictive Trade Practices (MRTP) Act, extensive trade reforms involving lowering of tariff and removal of physical barriers on imports, financial sector reforms permitting public sector banks and financial institutions to tap Capital Market, a policy to motivate inward flow of foreign direct investment and foreign institutional investment.

Reformation of banking industry has been accorded by the Federal Government due to its urgency to rescue the ailing financial institutions and to strengthen the capital base and the viability of these corporate institutions to help in stabilizing inflationary treads in the economic growth within and abroad.

Statement of Problem

Before this time, in Nigeria and the world over, mergers and acquisitions (M & A) were the words that used to evoke doubt, suspicion, and curiosity in the minds of general public and hostile reactions in the business world. Hence, the number of cases of mergers and acquisitions were few or even none, mostly when they were under the control of companies vested with promoters and financial institutions. Mergers and Acquisitions increased considerably in 90s, indicating its acceptance as a means for corporate restructuring and redirecting Capital towards effective management. The momentum took off in Nigeria from financial institutions since they no longer protect existing owners from takeover bids.

Getting unfettered from the rigid shackles of government control and exposed the market forces, the corporate Nigeria, through the CBN, have to chalk out and enforce a long-term strategies to enhance competitiveness and sustainability. Merger and Acquisition offer, inter-alia, strategy for this purpose. The objectives behind Merger and Acquisition include:

- Rectification of distortions of the past where growth and diversification were led by the ability to curry favour with the authorities than by the virtues of value creation.
- Consolidation of small and fragmented financial institutions.
- Compulsion to become world sized because of globalization of the economy, requiring corporate to focus on their areas of competency.

Since there is very little scope for individual companies to learn from its own past experience as merger and acquisition is a sporadic event, how does an acquirer determine whether or not a planned acquisition will prove beneficial. The rule of thumb to be any economic gain through merger. Post M & A economic gain or synergy will be generated only if the two companies worth more together than apart. The basic motive is understood as an attempt to create value and increase in capacity (synergy). If the synergy is positive, there should be economic justification for the merger, hence it is important to study whether companies involved in Mergers and Acquisitions are profitably viable and what effect merger has involved in the wealth of shareholders.

Literature Survey: Studies of the post-merger performance usually follow either of the two general approaches: share-price analysis or analysis of operating performance. Empirical research on share-price performance suggested that anticipated mergers gains are not accomplished. The acquiring company generally earns positive returns prior to announcements, but less than market portfolio in the post-merger period (Seavaes, 1994, Bhaget, Shleif and Vishny 1990).

- Ravenscrafl and Scherer (1987) examine the target line of business performance using operating earnings. They discovered that there is no strong evidence of improvement in performance for these target lines of business after merger. Their analysis of merger effect on regression of profits to norm shows that regression to norm exists and is faster for merging firms as compared to non-merging firms. They concluded that acquisition activity lowers profitability and that; part of this was due to regression to norm from unsustainably high pre-merger performance.
- Cosh el al (1998) attempt to identify successful mergers based on pre-merger characteristics, the impact of financial institutions as shareowners on the merger outcome, and finally the effect of mergers in the framework of the regression to norm. In all, they discovered that size was significantly different for the acquirers and the acquired firms. The analysis of persistence of profits shows that regression to norm exists in the absence of mergers and reinforced by their presence.
- Healy, Palepu and Ruback (1992): integrate accounting and stock return data in a consistent form to permit richer tests of corporate control theories. They discovered a strong positive co-relation between post-merger increase in operating cash flows and abnormal stock returns at merge announcements including those expectations of economic improvements which explain a significant portion of the equity revaluation of the merging firm.
- Ghemawat and Ghadar (2000) found in their studies that the rush towards huge mergers is based on faulty understanding of economics and that there are better ways of addressing globalization.
- Venkiteswaran (1997) analyzed the emerging scenario in the context of restructuring Corporate India, Mehta and Samanta (1997) provided a comprehensive framework for mergers in their study “Mergers” and Acquisitions: Native and Significance”.

- Yadav el als. (1999) conducted a study on profitability of mergers on some selected cases. In his study, pre and post merger profitability ratios of selected companies was carried out. Results indicate that mergers give positive synergies to Corporate Organzations.
- Pawaskar (2001) investigated the impact of mergers on Corporate performance by comparing the post-merger performance of the acquirer with its pre-merger performance, taking a sample of 36 cases of merger between 1992 and 1995. The regression results in the study showed that there are no significant differences in the financial characteristics of the two corporate firms in the mergers.
- Swaninathan (2002) conducted two tests with five corporate mergers to identify the effect of mergers on corporate performance. In her study she discovered that several mega-mergers in the Indian scenario showed that most of them, succeeded in achieving their financial objectives. Conclusion of the second study was that many (Ms & As) realized their operations synergies. But her EVA showed that in terms of delivering returns matching-market expectations, the mega-mergers of the 1990s did not suitably workout. Hence, not all (Ms & As) improved shareholders returns.
- Paul (2003) studied in his research the merger of Madura Bank with ICICI Bank. He found that BOM shareholders benefited from the merger in the short-run. ICICI Bank could increase its customers, branches and business which would be helpful to them in the long-run in rising to position of strength in the Banking industry.
- The effect of Cross-Border Acquisitions on shareholders wealth-Evidence from Switzerland study conducted by Lowinski et al (2004). The study covers 114 sample acquisitions by Swiss firms between 1990 and 2001 to look at the wealth effects of mergers activities in one of the most internationally oriented European economies, the study discovered that the inclusion of a top tier investments bank is not beneficial in the international mergers, indicting that the costs associated with hiring a top tier investment bank might out weigh the benefits.
- Mantravadi and Reddy (2009) analyzed operating performance and types of mergers in Indian industry using the data of 1991-2003 of 96 mergers and discovered that there are minor variations in terms of impact on operating performance following merger for different merger types.
- Studies of Mergers in Nigeria are quite few and all stopped at comparing pre-merger and post-merger performance using a case by case approach or a general description of mergers and acquisitions and their accounting framework.

The present study has been partitioned into five sections-literatures review and motivation of the study, research objectives and methodology, analysis of the study, regression analysis and findings, including policy implications and scope of further research.

Research Objectives and Methodology

Objectives: The objective of the study is to analysis post-merger operating performance and to study the effect of mergers on the shareholders wealth (Creation).

To embark properly on the accomplishment of the objectives, the following null hypotheses are developed for testing:

H_1: Mergers and acquisitions do not result in value addition to existing shareholders.

H_2: There is no sufficient difference between pre-and post-merger performance of merged companies under study period.

Sample and Data Collection

The study includes all the banking industries which have undergone merger during the period of 2001 to 2010. The empirical analysis of all individual mergers events has been carried out-pre-merger and post-merger to give a somewhat clear picture of their success or failure. There are about 20 merged banking companies in Nigeria during the above period. Out of which the sample consists of 8 selected merged Banking Companies for which data available for the entire period of the study.

Banks in Nigeria and Their Merging Trend

1.	Access Bank	–	Acquired Intercontinental Bank
2.	Citibank.		
3	Diamond Bank		
4.	Ecobank Nigeria	–	Acquired Oceanic Bank
5.	Enterprise Bank Limited	–	Formerly Spring Bank
6.	Fidelity Bank Nigeria.		
7.	First Bank of Nigeria		
8.	First City Monument Bank	–	Acquired FinBank.
9.	Keystone Bank Limited	–	Formerly Bank PHB
10.	Guaranty Trust Bank.		
11.	MainStreet Bank Limited	–	Formerly Afribank.
12.	Skye Bank.	–	Acquired Prudent Bank etc
13.	Stanbic IBTC Bank Nigeria Limited.		
14.	Standard Chartered Bank.		
15.	Sterling Bank	–	Acquired Equatorial Trust Bank.
16.	Union Bank of Nigeria	–	Owned by African Capital Alliance Consortium.
17.	United Bank for Africa.		
18.	Unity Bank Plc.		
19.	Wema Bank.		
20.	Zenith Bank		

Facts of the Case

- Website of Central Bank of Nigeria.
- 2010 Rankings of Nigerian Commercial Banks
- After Reforms, Nigeria has Twenty Commercial Banks, As of October 2011

The financial and non-financial data used in this study has been mainly drawn from Centres of Monitoring Nigeria Economy (CMNE). Database of Nigerian capital market (NSE), which is also considered as partially reliable. Nigerian Corporate database is utilized.

Data Analysis

In terms of objectives, the following analysis has been made:

Post –Merger EVA Analysis: From the view-point of liberalization, the last decade has shifted the focus of corporate goals to enhancing shareholders value. Hence, post-merger analysis of merged financial institutions has been carried out in terms of value addition to shareholders. For this purpose, two evaluation techniques of measuring shareholders value are employed. A broad scope measures consisting of Economic Value Added (EVA) and Market Value Added (MVA) and the conventional measures of Return on Net Worth (RONW) have been applied.

EVA, a new performance metric by Stern Steward of USA has gained popularity as a superior tool for measuring corporate performance. EVA indicates the amount of economic value created in any single accounting period and simply stated as the amount a corporate organization can earn in excess of its cost of capital.

EVA = Net Operating Profits after taxes but before interest less cost of capital employed.
i.e. EVA = NOPAT (-) COCE

Where:

NOPAT = Profit after tax and tax adjusted interest.
COCE = Weighted average cost of debt and equity capital (x) capital employed.

While EVA measures shareholders value addition in terms of operating performance, MVA measures the market's assessment of corporate value.

MVA = Market Value (-) Capital employed.

The relatively orthodox measure of shareholders value creation is the Return on Net worth (RONW) which is profit after tax divided by shareholders wealth i.e. paid up capital (+) Free reserves, less fictitious assets, if any.

$$RONW = \frac{\text{Profit after tax}}{\text{Net worth}} \times 100$$

$$\text{i.e.} = \frac{PAT}{NW} \times 100$$

Method of Analysis

Using value added metrics following analysis has been carried out for selected financial institutions for four post-merger periods (years).

- Intra-company comparison is carried out over post-merger period to see if shareholders value has improved over the post-merger period.
- Inter-Company comparison is carried out for average post-merger period to know who are the gainers in this detritus of shareholders value after merger.

For this purposes, absolute EVA and MVA data have been converted into relative figures using the following formula:

$$EVACE = \frac{EVA}{CE} \times 100$$

Where:

EVACE = Economic Value Added as a % of Capital Employed
EVA = Economic Value Added
CE = Capital Employed

Model Formulation

To study the impact of merger on corporate performance, the regression analysis is carried out for pre-merger and post-merger performance of sample institutions.

Pre-Merger Model:

$$EVA = a_1 + \beta_1 DEu + \beta_2 Cru + \beta_3 Cru + \beta_4 OEu + \beta_5 PMu + \beta_5 ROCEu + \beta_6 ERu + \beta_7 RONWu + \beta_8 SG + \beta_9 BIFR + Eu$$

Post-Merger Model:

$$EVA = a_1 + \beta_1 DEu + \beta_2 Cru + \beta_3 Cru + \beta_4 OEu + \beta_5 PMu + \beta_5 ROCEu + \beta_6 ERu + \beta_7 RONWu + \beta_8 SG + \beta_9 BIFR + Eu$$

Where:

DE = Debt Equity Ratio
CR = Current Ratio.
GR = Gearing Ratio
OE = Operating Expenses
PM = Profit Margin
ROCE = Return on Capital Employed.

ER = Expenses Ratio
RONW = Return on Net Worth
SG = Company Acquired by same Group
BIFR = Acquired Company under BIFR
T = Period
α is intercept $\beta_1$and β_2 are regression coefficients, and E is the error.

III Empirical Analysis

Inter-Company Analysis with RONW, MVA and EVA: After post-merger assessment of value addition within companies, an investigation has been conducted to measure variations across companies for all the three value added metrics for average post merger period. In this case also, technique of cluster analysis has been applied by:

- Ranking the companies by all three value added metrics separately in descending order.
- Classifying companies with similar values into broad clusters or groups.
- Examining these groups and explaining them.

Table 4 gives the average value addition in the post merger period by all three value added metrics, namely EVA, RONW and MVA along with their respective rankings. A perusal of the rankings in the table reveals the following groups:

Group I: Companies with value addition in post-merger years. This group consists of those with positive values indicating that such companies have added to shareholders value in the post merger period.

Group II: Companies with value erosion in post merger-years. This group consists of companies with negative values indicating that these companies have eroded value addition in the post-merger-period. RONW and Inter-industry Analysis. Same analysis has been carried out with this conventional measure of profitability and the following observations have been made.

Group I: With the traditional measure of profitability of shareholders value addition (RONW), 6 industries (from rank 1 to 6) get categorized in this group with positive values ranging from 73.72 million to 133 million showing gains for shareholders in post merger period.

Group II: The remaining industries with losses of 114.06 million in post merger period get categorized in this group.

MVA and Inter Industry Analysis

This measure of market's assessment of value addition to shareholders wealth has again grouped all industries into the following two categories.

Group I: 5-industries (from rank 1 to 5) get qualified in this group with positive shareholder value addition in the post merger period ranging from 16.36 million to 20.00 million.

Group II: Remaining 3 industries resulted in negative values for shareholders. The range of value erosion is -4.88 million to -4.06 million.

EVA and Inter Industry Analysis

Average EVA has been calculated for each industry after grouping all selected companies into groups to see which industries resulted in value addition to their shareholders after mergers and which adversely affected the shareholders interest. The following results emerged.

Group I: This group consist of any one Industrial Bank. The positive shareholder value addition in the average post merger period is 0.80 million.

Group II: The remaining 7 industries falling (from 2 to 7) (in this group with negative EVAs indicating value erosion for shareholders in the post merger period. Value erosion for these industries has been in the range of -3.27 million to -82.7 million.

Table 4: Inter Industry Analysis with Value Added Metrics

Group	Ranks	RONW	%	Ranks	MVA	%	Ranks	EVA	%
1	1-5	5	62.5	1-5	5	50	1	1	10
11	.3	3	37.5	6-10	5	50	2-10	9	90
Total		8	100			100		10	100

Intra Industry Analysis With Ronw, Mva And Eva

After examining net gain or loss in terms of value addition for an industry as a whole, it is further investigated whether within an industry with net gain or loss, are there any variations in terms of real gainers or losers i.e are there any value creation in industries which have on the whole not fared well or vice versa. Table gives the results of classification of all selected companies into ten broad categories along with average mean for each industry for all three values added metrics. More descriptive analysis based on above table can be computed. This is correlation analysis which will establish the relationship between these three values added metrics within industry to get an insight into the variation in the performance vis-à-vis three metrics. RONW, MVA and EVA.

IV. Regression Analysis

In order to analyze data of post and pre-merger period, a statistical tool is useful and will provide better understanding. To study the impact of merger on shareholders value creation we tried to use the regression analysis on Nigerian corporate sector.

Pre-Merger Model:

$$EVA = \alpha_1 + \beta_1 DE_{i.t} + \beta_2 CR_{i.t} + \beta_3 GR_{i.t} + \beta_4 OE_{i.t} + \beta_5 PM_{i.t} + \beta_5 ROCE_{i.t} + \beta_6 ER_{i.t} + \beta_7 RONW_{i.t} + \beta_8 SG + \beta_9 BIFR + E_{i.t}$$

Post-Merger Model:

$$EVA = \alpha_1 + \beta_1 DE_{i.t} + \beta_2 CR_{i.t} + \beta_3 GR_{i.t} + \beta_4 OE_{i.t} + \beta_5 PM_{i.t} + \beta_5 ROCE_{i.t} + \beta_6 ER_{i.t} + \beta_7 RONW_{i.t} + \beta_8 SG + \beta_9 BIFR + E_{i.t}$$

Where:

DE = Debt Equity Ratio
CR = Current Ratio.
GR = Gearing Ratio
OE = Operating Expenses
PM = Profit Margin
ROCE = Return on Capital Employed.
ER = Expenses Ratio
RONW = Return on Net Worth
SG = Company Acquired by same Group
BIFR = Acquired Company under BIFR
T = Period

α is intercept, $\beta_1$and β_2 are regression coefficients, and E is the error.

The results show that expense ratio of the company is significantly and negatively related to pre and post merger's shareholders value creation. It means higher expenses lead to lower shareholders value which is according to the theory of finance. We also noticed that operating expenses of the company is positively related to EVA and also significant at 1% level in company's pre-and-post mergers performance. ROCE of the company is significant, also positively correlated to EVA in pre-and-post mergers financial performance. While debt equity, current ratio and RONW are negatively correlated with shareholders creation capacity of the company. It can be said that increase in debt equity, current ratio and RONW will lead to decrease in EVA.

While evaluating the impact of acquirer a company and scheme of merger as dummy variable are not significant. But acquirer in the same group is negatively correlated wit EVA.

In pre-merger regression analysis, results show that the value of R_2 is 0.86, which shows that the sample regression explains 86% of aggregate data. The overall model is also significant with adjusted R_2 value of 0.85, so it, can be concluded that the model is applicable to Nigerian corporate.

Regression result of post-merge indicates the value of R_2 and adjusted R_2 value are 0.87 and 0.86 which is significant at 1% level. So model is fit for study.

The classical finance theory said that company's shareholders value creation is based on company's earning ability and company's return on its net worth. On the basis of regression work we have noticed that the company's shareholders value creation is highly dependent on operating expenses, profit margin, ROCE and Expenses ratio.

Conclusions and Policy Implementations

- From the analysis of companies for four cross sectional post merger years it was learnt that 80% of companies resulted in value erosion in terms of EVA with decreasing or no trend over the four merger years. Only 20% of sample companies revealed positive value addition with increasing trend in post merger years.
- The conventional measure of estimation of value for shareholders, namely RONW revealed results with EVA. Only 25% companies showed increasing trend of value in post merger period. The remaining 75% of companies failed to deliver value after mergers.
- With regard to market's assessment of company's value in post merger period 70% of companies revealed positive post merger values in the first year indicating that companies gained from mergers in terms of appreciation in their stock value. Only 10% of these companies exhibited an increasing trend over four years which was very significant.

Number of companies benefited maximally in terms of shareholders value appreciation in the post merger period. But in most of the companies, however, appreciation in stock value gained immediately after mergers was lost in the subsequent years.

Future Scope:

The study focused on the effect of mergers and acquisitions on shareholders value. Further research in this area could be an extension of the present study, by types of mergers and its impact on shareholders value and company's operating performance. The study has assessed success or failure of mergers in financial terms. Human aspect of mergers has not been touched. Gauging the success of mergers through this aspect could be another area of interest.

References

Agarwal A. and J.E. Jaffe, (1992). The Post Merger Performance Puzzle, Working Paper, University of Alabama.

Asquith, Paul, (1983), “Mergers Bids, Uncertainty and Stock Returns”, Journal of Financial Economics, Vol. 11, April, pp. 51-83.

Basant, Rakesh, (2000), Corporate Response to Economic Reforms” Economic and Political Weekly, March 4, pp. 813-832.

Firth .M. (1980), Takeover, Shareholders Returns, and the Theory of the Firm” Quarterly Journal of Economics, Vol. 94, pp. 235-260.

Graham, J.R, M.L. Lemmon, and J.G. Wolf (2002), Does Corporate Diversification Destroy Value” Journal of Finance Vol. 57, pp. 695-720.

Jarrel, G and A Poulsen, (1989),” The Return to Acquiring firms in Tender Offers, Evidence from three Decades Financial Management, Vol. 18, pp. 12-19.

Kohers, N and T, Kohers, (2000)”, The Value Creation Potential of High-Tech Mergers” Financial Analysis, Journal, May/June, pp. 40-48.

Mantravadi, P and Reddy A.V. (2000). Type of Merger and Impact on Operating Performance – Indian Experience” vol. 7, No. 1, pp. 88-111.

Mathew C.J. and Raju G. (2004), Mergers in the Banking Sector, a case study of HDFC and Times Bank. The Management Accountant, July, pp. 557-560.

Mehta D. and Samanta S. (1997), Mergers and Acquisitions; nature and significance” Vikalpa 22(4), pp. 31-38.

Schwert, G.W. (1996), “Markup Pricing in Mergers and Acquisitions”, Journal of Financial Economics, vol. 41, pp. 153-162.

Swaminathan .S. (2000), “M & A Payoffs to shareholders less than Expected, Indian Management, August, pp. 64-68.

Walker, M. (2000), “Corporate Takeovers, Strategic Objectives, and Acquiring Firm Shareholders Wealth”, Financial Management Spring, pp. 53-66.

Yadav .S.S, Jain. P.K. and Jain .N.S. (1999), Profitability of Merger-some selected cases”, The Management Accountant, July pp. 502-507.