INVESTIGATING THE IMPROVEMENT IN CORPORATE PERFORMANCE AFTER MERGER AND ACQUISITION IN NIGERIA: A SECTORAL ANALYSIS

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Oloyede, John Adebayo (PhD)
Banking and Finance Department, Faculty of Management Sciences,
Ekiti State University, Ado Ekiti, Nigeria.

Sulaiman, Luqman Adedamola
Banking and Finance Department, Faculty of Management Sciences,
Ekiti State University, Ado Ekiti, Nigeria.

Abstract

This study examines the corporate performance of firms that were involved in merger and acquisition activity in the food and beverages, conglomerates and manufacturing sectors in Nigeria. The study covers 3-years pre-merger period and 3-years post-merger period, with the year in which merger took place omitted for each firm in the sample. Financial ratio analysis is used to show comparison between the pre-merger and post-merger periods while paired sample t-test is employed to determine significant variations following merger. The findings suggest that merger in the food and beverages sector has significant effect on only one measure of profitability (Return on assets) and liquidity. For conglomerates sector, merger has significant effect on profitability (in terms of earning before taxes and gross profit margin) only. Surprisingly merger in the manufacturing sector does not have significant effect on any of the corporate performance measures used in the study.

Keywords: Merger and Acquisition (M & A), Corporate Performance, Nigeria, Financial Ratio analysis, T-test.

1. Introduction

In the corporate world today, merger and acquisition (M & A) is a corporate restructuring strategy widely used to achieve increased market power, gain competitive advantage, heightened diversification and synergy. M & A involves the combination of two or more firms to evolve into a single entity. According to Pillof and Santomero (1996), the traditional view on M & A activity suggests that it results in overall benefits to shareholders when the consolidation post-merger firm is more valuable than the simple sum of the two separate pre-merger firms. This is because M & A increase firms' ability to penetrate into the market, gain access to resources and enjoy economies of scale.

Mergers and acquisitions (M & A) are a global phenomenon, with an estimated 4,000 deals taking place every year (Alao, 2010). It is widely believed that Merger and acquisition improves operating performance by paving way for the profitability, liquidity and solvency objectives of a corporate entity to be adequately achieved. This made M & A emerge as the best form for corporate restructuring as suggested by literatures. Pazarskis, Vogiatzogloy, Christodoulou and Drogalas (2006) stated that the major proposition for M & As increased activity is mainly imposed by intense competition, evolving technology, low interest rates, changing regulations in the financial markets, and many other factors.

According to Afolabi (2011), the primary motives for M & A are cost savings and revenue enhancement. Firms involved in M & A activity are expected to benefit large economies of scale and accrue more revenue through its effects on firm size, firm scope (through either product or geographic diversification), or market power. Those who advocate mergers will argue that the merger will cut cost or boost revenues by more than enough to justify the price premium (Ismail, Abdou and Annis, 2011). M & A is a source for corporate growth. Saboo and Gopi (2009) suggested that mergers and acquisitions are used for improving competitiveness of companies and gaining competitive advantage over other firms through gaining greater market share, broadening the portfolio to reduce business risk, entering new markets and geographies, and capitalizing on economies of scale.

Corporate worldwide have been aggressively trying to build new competencies and capabilities, to remain competitive and to grow profitably (Mantravadi and Reddy, 2008). These have led to the increase in number of firms entering into merger and acquisition agreement. Many corporations find

that the best way to get ahead is to expand ownership boundaries through mergers and acquisitions (Ismail et al, 2011). In Nigeria today, the desire to enter into M & A agreement is largely influenced by the economic environment and the need to put their businesses on the path of competitiveness within and outside the shores of the country.

Merger and acquisition is perceived by many firms in Nigeria to be a long term business strategy to improve corporate performance. Their perception is based on the theoretical view that merger and acquisition provides an avenue to achieve synergy, large economies of scale, expand business operations and reduce costs. However, the success of M & A largely depends on the extent of management efficiency and discipline. This has made the effect of M &A on firms' performance a debatable issue.

This study examines the performance of firms that have engaged in merger and acquisition activity in Nigeria by conducting a sectoral analysis of the Food and Beverages, Conglomerates and Manufacturing sectors. A sample of 2 companies is drawn from the food and beverages sector, 3 from the conglomerates sector and 2 from the manufacturing sector. The study is motivated on the need to provide insights on how M & A affects the profitability, liquidity and solvency performance of the firms in these various sectors. The rest of this paper is structured as follows – section two provides the review of literature, section three discusses the research method, section four gives the empirical results and section five concludes the study.

2. Review of Literature

Merger and acquisition is the most common business strategy used by many corporate to increase market power, gain competitive advantage and improve financial performance. A merger can be defined as a transaction where one entity is combined with another so that one initial entity loses its distinct identity, an acquisition is classified as a transaction where one firm purchases a controlling stake (and/or the whole) of another firm (Afolabi, 2011). A merger refers to the fusion of two or more firms to achieve results better than when the firms were solely operating. Such actions are commonly voluntary and often result in a new organizational name (often combing the names of the original organizations) (Alao, 2010). An acquisition occurs if an organization buys off the net assets of another firm. The acquired firm is either fused into or becomes a subsidiary of the acquiring firm. In acquisition, the acquiring firm retains its identity.

Literature have identified the various forms of merger as follows;

i. **Horizontal Merger**: Horizontal merger is said to take place when two or more firms in the same line of business combine together. Dictionary of Business and Economics defines horizontal merger as the expansion of a business through the acquisition of additional division or other firms engaged in essentially the same stage of production of the same product.

ii. **Vertical Merger**: It is the combination of two or more firms involved in different stages of production or distribution (Arokayu, 2004). Firms involved in vertical merger combine either to be source (supplier) of inputs or marketer of goods and services (outputs)

iii. **Cogeneric Merger**: The term cogeneric means “allied in nature or action”. A cogeneric merger therefore refers to combination of firms in related business either in terms of customer functions, customer groups, or alternative technologies used. A typical example is a bank acquisition of a leasing company.

iv. **Conglomerate Merger**: This form of merger occurs when firms in unrelated business converge. Modern Economics Dictionary defines conglomerate merger as the consolidation of a previously independent firm with separate and distinct markets as a new subsidiary of the holding company of a conglomerate it follows therefore that there is no relationship among the business acquired.

Irrespective of the forms of merger, Oloyede and Oke (2001) highlighted the reasons for mergers as follows.

- To increase market share,
- To build an empire
- To gain promotional profitability,
- To expand production without price reduction,
- To acquire capacity at reduced price.
- To obtain real economies of scale,
- To spread risk,
- To rationalize production
- To use complimentary resources;
- To avoid the firm failure, and
- Tax advantage.

Osaze (2004) attributed the failure of "corporate marrieges" i.e. mergers and acquisitions to include the followings;

i. Disregard or inadequate appraisal of the complexities before the mergers takes place, combined with the tendency to relax after it.
ii. Poor planning and poorly executed integration
iii. Overbidding
iv. Failure to consider adequately the question of fit between the buyer and the seller
v. Buying a business not subject to conglomeration
vi. Making sweeping change in policies and procedures prematurely.
vii. Low publicity of merger in firms compared with diversification of firms
viii. Lack of adequate knowledge and information of the seller firm.
ix. Non-review of diversification opportunities.

2.1 Review of Prior Research on M & A

Seigel and Simons (2008) assessed the effects of mergers and acquisitions on firm performance, plant productivity, and workers for virtually all Swedish manufacturing firms and employees. They found that mergers and acquisitions enhance plant productivity, although they also result in the downsizing of establishments and firms. Also, it was discovered that firm performance did not decline in the aftermath of the ownership changes. Saboo and Gopi (2009) studied the impact of mergers on the acquiring firms by examining some pre-merger and post-merger financial ratios of these firms and to see the differences in the pre-merger and post-merger ratios of the firms that go for domestic acquisitions and the firms that go for the cross border acquisitions. The results show that mergers have had a positive effect on key financial ratios of firms acquiring domestic firms and a slightly negative impact on the firms acquiring cross-border firms.

Selvam, Bobu, Indhumathi and Ebenezer (2009) examined the impact of mergers on the corporate performance of acquirer and target companies in India using a sample of thirteen companies that underwent merger in the same industry during 2002 – 2005. Employing ratio analysis and t-test, they found that shareholders of the acquirer companies increased their liquidity performance after the merger event. Their study supports the findings of existing research that the acquirer companies always benefited more than the target companies in the merger event. Mantravadi and Reddy (2008) researched into the impact of mergers on the operating performance of acquiring corporate in different industries, by examining some pre-merger and post-merger financial ratios, with the sample

of firms chosen as all mergers involving public limited and traded companies in India between 1991 and 2003. The results on each of the industry showed that merger had a slightly positive impact on profitability of firms in the barking and finance industry while in the pharmaceuticals, textiles and electrical equipment industries, merger had a marginal negative impact on profitability and returns on investment. For the chemicals and Agri-products industry, mergers had caused significant decline, both in terms of profitability margins and returns on investment and assets.

Pazarskis et al. (2006) used financial and non-financial characteristics of fifty Greek companies listed on the Athens Stock Exchange (ASE) that undertook at least one merger or acquisition in the period from 1998 to 2002 to investigate the improvement of corporate performance of these firms after merger. The main finding emerging from the study indicates that profitability of a firm that performed merger and acquisition is decreased as a result of merger/acquisition event that took place in the period under review. Choi and Russell (2004) assessed the economic gains around mergers and acquisition (M & A) in U.S construction sector and the determinants of post. M&A performance such as; method of payment, acquisition timing and transaction size. Using cumulative abnormal returns to indicate improvement in performance, they analyzed 171 M&A transactions that took place between 1980 and 2002. The study showed that the number of acquisition transactions increased dramatically during the late 1990s and firms witnessed insignificant improved performance. Also, they found no evidence that method of payment, acquisition timing and transaction size had influence or determines performance after M&A event.

Cabanda and Pajara-Pascaud (2007) examined the corporate performance of Philippines shipping companies after merger. The study spans from 1994 to 2003 and employs the conventional accounting and financial approaches in analyzing the effects of merger. 3 years before merger and 3 years after merger were considered for the short-run analysis and 7 years after merger for the long-run analysis. It was concluded that mergers in the Philippines shipping industry does not lead to improved performance in both the short and long run. Lau, Proimos and Wright (2008) examined the operating performance of merged firms for a sample of 72 Australian mergers between 1999 and 2004. Profitability, cash flow, efficiency, leverage and growth proxy as the performance measures. Evidence that mergers improve the post-merger operating performance was provided in the study.

Kumar (2009) evaluated the operating performance of a sample of 30 acquiring companies that were involved in merger activities in India between 1999 and 2002. Using accounting data, it was found

that profitability, asset turnover and solvency of the acquiring firms in the post-merger period show no improvement in comparison with values in the pre-merger period. Ramaswamy and Waegelein (2003) investigated the long-term post-merger financial performance of merged companies in Hong Kong using a sample of 162 merging firms from 1975 to 1990. The coverage of the analysis includes five years pre and post-merger period. Their study showed that there is positive significant improvement in the post-merger performance.

3. *Research Method*

This study investigates the post-corporate performance of firms that merged in the Foods & Beverages, Conglomerates and Manufacturing sectors of Nigeria with samples of 2, 3, and 2 firms chosen from the sectors respectively to conduct an analysis on each sector. Same as Mantravadi and Reddy (2008), the method of analysis are the financial ratio analysis and t-test. The mean of the selected financial ratios are calculated for 3 years before and 3 years after merger event, with the exemption of the year merger was transacted and afterwards, comparing the mean pre-merger financial ratios and post-merger financial ratios. T-test is used to determine any significant variations in the financial ratios. The financial ratios were calculated using data sourced from the Nigerian Stock Exchange (NSE) Factbook and Annual Statement of Accounts and Reports of the respective firms in the sample. In the pre-merger period, the data consisted of the acquiring firm and in the post-merger period, the data is that of the combined firm. To evaluate corporate performance, the financial ratios selected measure profitability, liquidity and solvency of firms. The scope of the study covers a period between.

4. *Research Hypotheses*

The objective of this study is to conduct a sectoral analysis in order to examine the post-merger corporate performance of firms in the Food & Beverages, conglomerates and Manufacturing sectors in Nigeria. In examining this objective, the following null hypotheses were formulated;

1. M&A does not have significant effect on the profitability of merged firms in each of the sector in Nigeria.
2. M&A does not have significant effect on the liquidity of merged firms in each of the sector in Nigeria.
3. M&A does not have significant effect on the solvency of merged firms in each of the sector in Nigeria.

5. *Financial Ratios*

Financial ratios are the relationship between the values of items in a firm's balance sheet and/or profit and loss account. It helps to make qualitative assessment of the firm's financial position and performance. The financial ratios are grouped into profitability, liquidity and solvency ratios. According to Courtis (1978), profitability ratios gauge a company's operating success over a given period of time; liquidity ratios measure the short term ability of a company to pay its debt and to meet unexpected cash needs, and solvency ratios which indicate a company's ability to meet long term commitments on a continuing basis.

The financial ratios used in the study are Earning before taxes/Net worth, Return on Assets, Gross Profit Margin, Current ratio, Net worth/Total Assets and Total debt/Net worth. These financial ratios are categorized into 3 groups as shown in Table 1.

Class	Financial ratio	Code
Profitability	Earning before tax/Net worth	P_1
	Return on Assets	P_2
	Gross Profit Margin	P_3
Liquidity	Current ratio	P_4
Solvency	Net worth/Total Assets	P_5
	Total debt/Net worth	P_6

Table 1: Categorization of Financial Ratios

A Priori Expectation.

Post-merger P_1 > Pre-merger P_1

Post- merger P_2 > Pre- merger P_2

Post- merger P_3 > Pre- merger P_3

Post- merger P_4 > Pre- merger P_4

Post- merger P_5 > Pre- merger P_5

Post- merger P_6 < Pre- merger P_6

5.1 Empirical Results

The mean pre-merger and post-merger financial ratios computed for each sector were compared. T-test is employed at 0.05 significance level to determine if there was any statistically significant improvement or decline. This section test for the hypotheses stated in the previous section in each sector under study.

6. *Presentation and Analysis of Results*

The result of the mean ratios of the individual sectors under review are presented and analyzed below on sectoral basis.

Financial Ratio	Pre-merger	Post-merger	t-value
P_1	1.1496	1.0667	0.435
P_2	0.3346	0.4700	-2.457*
P_3	28.0500	27.2067	0.284
P_4	3.117	40.1200	-2.963*
P_5	1.2557	1.3867	1.581
P_6	2.3407	1.8400	0.641

Table 2 : Results of Mean of Food & Beverages Sector

(*) denotes significance at 0.05 significance level

Source: Author's calculation

From Table 2, the results indicate that P_1 marginally in the post-merger era compared to the pre-merger era (1.1496 to 1.0667) but the decline is not statistically significant. However, there is clear evidence that P_2 improved from 0.3346 before merger to 0.4700 after merger and the t-value (-2.457) shows that the improvement is statistically significant. P_3 in the pre-merger period is slightly higher than what was obtainable in the post-merger period. There was a marginal decline from 28.0500 to 27.2067 but the decline is not statistically significant on firm's corporate performance. There was tremendous increase in liquidity after merger. P_4 increased from 3.117 to 40.1200, and the increment is statistically significant. P_5 and P_6 improved after merger, though they were not statistically significant. P_5 slightly rose from 1.2557 to 1.3867 while P_6 marginally declined from 2.347 to 1.8400.

The above results suggest that merger has had significant effect on profitability (in terms of return on assets) and liquidity. Hence, Hypotheses 1 and 2 is rejected while hypothesis 3 is accepted.

Financial Ratio	Pre-merger	Post-merger	t-value
P_1	1.3507	0.9967	2.041*
P_2	0.7397	0.5433	1.605
P_3	58.0533`	41.5833	3.551*
P_4	122.4011	8.5600	1.309
P_5	2.5683	2.6367	-1.171
P_6	0.5641	0.4633	1.149

Table 3: Results of Mean Ratios of Conglomerates Sector

(*) denotes significance at 0.05 significance level
Source: Author's calculation

The results as shown in Table 3 revealed that P_1 reduced following merger (1.3507 to 0.9967) and it is statistically significant. Also, P_2 reduced in the post-merger era from 0.7397 preceding merger to 0.5433 and the t-value suggests it is close to being significant. P_3 is statistically significant but it declined in the period after merger event (58.0533 to 41.5833). this is a clear indication that merger negatively impact on the operating performance (profitability) of the conglomerate firms. P_4 drastically dropped from 122.4011 to 8.5600 in the post-merger period, however, the drop is not statistically significant. Merger caused a huge decrease in liquidity. Both P_5 and P_6 are not statistically significant but there was a slight increase in P_5 and P_6 experienced a decrease after merger, implying there was improvement in the solvency of conglomerate firms though not significant.

The overall findings indicate that merger has had a significant declining effect on profitability (in terms of earning capacity and sales efficiency only) in the conglomerates sector. This led to the rejection of hypotheses 2 and 3 while hypothesis 1 is accepted.

Financial Ratio	Pre-merger	Post-merger	t-value
P_1	0.2615	0.2300	0.144
P_2	0.2180	0.1650	0.247
P_3	28.8000	23.0850	0.633
P_4	0.0284	0.5100	-1.484
P_5	0.9180	0.9150	0.033
P_6	0.4080	0.2800	0.322

Table 4 : Results of Mean Ratios of Manufacturing Sector

Source: Author's calculation

From Table 4, it could be inferred that irrespective of the fact that either the financial ratios increased or decreased in the post-merger period, they are all not statistically significant. In the post-merger period, P_1, P_2, and P_3 declined from 0.2615, 0.2810, and 28.8000 in the pre-merger period to 0.2300, 0.1650 and 23.0850 respectively. P_4 increased from 0.0284 to 0.5100, though its t-value suggests that the increment is not statistically significant following merger. There is only a differential of 0.0030 between pre-merger P_5 and post-merger P_5, implying that is decreased slightly. There was improvement in P_6 because it declined from 0.4080 to 0.2800 after merger.

Above all, merger does not have significant effect on the profitability, liquidity and solvency of the merged firms in the manufacturing sector. Therefore, hypotheses 1, 2, and 3 are accepted.

7. *Conclusion*

Merger and Acquisition (M&A) is a corporate strategy designed by firms to increase shareholders' wealth, maximize firm value and achieve synergy. This study empirically investigated the post corporate performance of firms in the food and beverages, conglomerates and manufacturing sectors that undertook merger transaction. The specific objectives were to examine if there is any significant variation when comparing the pre-merger and post-merger financial position of the firms measured in terms of profitability, liquidity and solvency.

The Food and Beverages sector improved only in return on assets from 0.3346 to 0.4700, the marginal increase was statistically significance while earnings before taxes/networks, and gross profit margin declined but not statistically significant. The improvement in only return on assets does not give enough evidence to justify that profitability has improved due to M&A. The liquidity ratio i.e. current ratio significantly rose in the post-merger era to adduce that firms in this sector adequately possess the ability to meet the short term obligations after M&A event. The solvency ratios improved though their improvements are not statistically significant. This shows that M&A has assisted firms to increase and improve the quality of their assets and also reduce debt utilization, though these improvements may not enhance corporate performance in the long run.

Conglomerate sector showed significant decline in profitability measured by earning before taxes/net worth and return on assets while gross profit margin also declined but it was statistically insignificant. M&A in this sector irrespective of the statistical significance of the profitability ratios has demonstrated negative influence on the operating performance of these firms. The liquidity ratio

reduced in the pre-merger period, however the reduction was not statistically significant. M&A in this sector means that firms involved in M&A witnessed downward turn in their liquidity performance. The solvency ratios showed insignificant improvements, implying that the ability of firms to meet its long term obligations may not ultimately improved corporate performance.

The manufacturing sector profitability ratios all declined in the post-merger period, though the decline does not play much of a significant role on the corporate performance of firms. This implies that M&A adversely affected the financial performance of these firms. The liquidity position of the firms improved although not significant enough. This presumes that M&A increased liquidity performance but not to extent of having an effect on corporate performance. The solvency ratios did not show statistical significance on the corporate performance but it can be observed that debt component in the capital structure of the companies has reduced but with no significant effect on the firms.

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