



Research Paper

THE EFFECTS OF MERGERS & ACQUISITIONS ON FINANCIAL PERFORMANCE: CASE STUDY OF UK COMPANIES

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ABSTRACT

The objective of this research is to examine the effect of merger & acquisitions on financial performance on United of Kingdom firms. The research was done on 40 companies listed under London Stock Exchange (LSE) that has undergone consolidation in 2011. Comparisons are made between 5-years premerger & acquisition and 5-years post-merger & acquisition financial ratios. The independent variables of the study is Mergers and acquisition and meanwhile the dependent variables are Return on Assets, Return on Equity, Earning per Share, and Net Profit Margin. The study employed Descriptive statistics and Paired sample (T- test) and the result illustrated that the variable a positively correlated to mergers and acquisition. While mergers & acquisitions is found to have a significant impact on Return on Assets, Return on Equity and Earning per Share. Other than that the study uses a Convenience sampling as a sampling technique. Furthermore, it is recommended to use other financial ratios that have not been used in the study with a wider time span and greater sample size to portray a clearer picture for the topic. Lastly the research will give the community, shareholders and directors advantage whether to consolidate other firms to gain profit. The outcome shows that the net profit margin not affected by mergers while return on asset return on equity and earning per share affected by mergers and acquisition.

Key Terms: *Financial Performance, Net Profit Margin, Return on Asset, Return on Equity, Earning per share, United Kingdom*

1. INTRODUCTION

The main aim of this research study is to explore and identify the effects of mergers and Acquisitions on the company financial performance and it is a study of the Companies in the UK that has undergone mergers and acquisition in 2011. Tracking back to history mergers and acquisition was first adopted by Wiley and it has evolved in 5 stages where the first stage started in the 1897. Two companies together are more valuable than two separate companies furthermore, this constitute the motive behind mergers and acquisitions of companies in the UK. The main reason of buying a company is to create shareholder value over and above that of the sum of the two companies. Thus, this basis is mainly attractive to companies when times are threatening. Moreover, Strong companies will act to buy other companies to create a more competitive, cost efficient company and the companies will come together hoping to gain a greater market share or achieve greater efficiency (Maditinos et al., 2009).

Mergers and acquisition has always been an issue for strategic managers and financial analysis, which due to the high competition arising from the fast-changing global market, it has significantly resulted in a condition where firms are finding it gradually difficult to remain competitive. Several studies have been conducted in developed and developing countries in order to address the effects of mergers and acquisition on company financial performance. Kruse, Park and K. Suzuki, 2003 did a study on the Japan manufacturing industry; Pazarskis, Vogiatzogloy, Christodoulou and Drogalas, (2006) concentrated on Greece manufacturing companies; Ramaswamy and Waegelein (2003) did in Hong Kong production companies; Tang (2015) research on bank sector in Philippine; Dutescu, Ponorica and Stanila (2013) concentrated on Romania on consumer goods and service market; and lastly Hagedoorn and Duysters (2000) concentrated on Holland technology sector. Most of the previous studies on mergers and acquisition utilize financial variables such as Return on assets, Gross profit margin, Return on capital employed, Market Growth, total assets ratio, return on net worth, operational profit margin as their research variable.

According to Healy, palepu and Ruback (1992), the resultant costs and benefits of mergers and acquisition is really a corporate issue and may affect the firm's performance either positively or negatively. Therefore the firm shareholders and their agents are faced with issues in other to determine whether this strategic activities and decisions will end up improving the company's financial performance (Katu, 2013). Although observing into the problem of mergers and acquisition as always been seen as a very difficult issue for the leaders of companies. As a number of M&A literature and economic theories present that if firm don't practice mergers and acquisition shareholders wont experience positive abnormal earnings from anticipated value creation post-merger (Cartwright & Cooper, 2013; Moeller et al., 2005). According to long (2015) firms shareholders value can increase due to acquisition activities. Other than that Li and Pan (2013) also argued the value of the acquired firm will increase other than functioning individually. Fluck and Lynch (2011) also found that consolidation activities commonly used for marginally profitable startups and also this activity will lead to big loss of the firm when it face problems that occurs in the process of mergers and acquisition (Eliasson, 2011).

This research paper will have importance to a several number of shareholders. It will also be a value for investors and firms in the LSE in understanding the significant of mergers and acquisition in analyzing firm performance. The project will further provide additional insight of impact of mergers and acquisition on financial performance in UK, which would be value for researchers and academicians in the same field.

Research Objectives:

- ✓ To examine the impact of mergers and acquisitions on return on assets (ROA)
- ✓ To examine the impact of mergers and acquisitions on return on assets (ROE)
- ✓ To examine the impact of mergers and acquisitions on earning per share (EPS)
- ✓ To examine the impact of mergers and acquisitions on Net profit margin (NPM)

2. LITERATURE REVIEW

In accordance to Manne (1965) as most cited definition, merger and acquisition can be defined as the collision of two business entities in order to obtain a specific business objective (Yanan et al., 2016). Merger and acquisition are often used interchangeably, but they are not the same terminologies. Moreover, merger and acquisition can be defined as two or more organization join together to constitute one organization, which is stated by Copeland, Weston and Shastri (1983). Based on Healy and Ruback (1992), financial performance refers to the measure of how companies utilize its assets from its primary mode of doing business in order to generate income. In Mergers and Acquisitions, firm's financial performance is gauged by assessing the liquidity, Profitability, and solvency (Saboo and Gopi, 2009).

There are various theories that are related to merger and acquisition phenomena and one of them is synergy. Sirower (2006) states that synergy has the type of reactions that happen when two or more factors consolidate to create a noteworthy impact together (Ficery et al., 2007). On the other hand, authors like Alexandritis, Petmezas and Travlos (2010) states the main aim of mergers and acquisitions is to build shareholder wealth through expanded synergies. Takeovers that are propelled by accomplishing synergy will produce positive total gains. There are three types of synergies and these are cost of production related that leads to operational synergy, cost of capital related that leads to financial synergy and price related that leads to collusive synergy. This theory explains merger and acquisition transactions that are undertaken with the aim of realizing synergies that will boost future cash flows thereby enhancing firm's value (Ogada et al., 2016). Operational synergies can be originated from the combination of operations of separate units; such as joint sales force and the transfer of knowledge (Hellgren et al., 2011). On the other hand, the financial synergy theory is based on the proposition that nontrivial transaction costs associated with raising capital externally as well as the differential tax treatment of dividends; may constitute a condition for more efficient allocation of capital through mergers from low to high marginal returns, production activities and possibly offer a rationale for the pursuit of conglomerate mergers (Ogada et al., 2016). Thus synergy theory plays an important role to elude the mergers, which can effects, the firm's performance. Furthermore, there are number of literatures on merger and acquisition which supports the view that market for corporate takeover is undertaken to obtain a number of objectives including to achieve operational efficiency or financial improvement through synergy either in the form of revenue, cost or financial synergy. Most often cited objective for merger and acquisition is to achieve synergy through combination of operation of both target and acquiring company (Ashfaq, 2014).

The Valuation theory contends that directors have better information about the objectives value in an acquisition than stock markets or shrouded interests in other organizations and the procured organization is used to gain ownership in other organizations as stated by Holderness and Sheehan (1985). The ambiguity of the private data makes it difficult to value the advantages involved. Through this private data, the net gains can be accomplished (Trautwein, 1990). This net gains can be accomplished, when inside information gives an organization more value than the market has valued it to have. Indeed, even productive markets can't draw an image of an organization's actual value if one buyer

possess inside information (Dilshad, 2013). Empire building implies that directors may have incentives to grow their firm past its optimal size. In accordance to Amihud and Lev (1981), a greater firm gives more status than a smaller one and managerial pay is emphatically related with the span of the firm which effects on total firm performance. On the other hand, Tong (2012) states bigger and more aggregate firms empower managers to differentiate their wealth and to enhance their job security since the cash flows of the objective firms are not exactly perfectly linked with their own firm. Moreover, in the lance of firm performance, Walsh (1988) reported that consolidating organizations have a higher executive turnover than non-merging organizations, which bolsters a clarification of mergers in terms of managers' quest for opportunities as per cite by Noren and Jonsson (2005).

2.1 Empirical Studies

Several empirical literature studies are notable and high lightened. Sulaiman (2012) carried out this study to comprehend the impacts of business mergers on the Oil and Gas industry of Nigeria. The point of this research is to see if mergers enhance the after merger performance of sample firms from the Oil and Gas industry sector of Nigeria. The results of investigation demonstrate that post-merger profitability, liquidity, efficiency capital and leverage position enhanced fundamentally. Sibel and Ihsan (2012) analyzed the impact of sectorial and geological diversification on the performance of Turkish banks and attempted to show how the diversification influences banks' performance. The review investigated 50 Turkish banks that diversified between the periods 2007 and 2011. The findings affirm the results of the present review, which did not find any significant relationship amongst diversification and performance (Bendob, 2015).

Kruse, Park and K. Suzuki (2003) dissected the long-term working performance of Japanese companies following the merger and acquisition agreements. The main aim this review is to examine the long-term effect of merger and acquisition on the working performance of Japanese acquiring companies. In this review the accounting based ratios such has ROE, ROA, Net profit, earning per share, and return on capital employed (ROCE) are utilized to gauge the operating performance taking after the merger. It is finalized that merger and acquisitions deals significantly impact on the long-term performance of procuring firms. Marangu (2007) conducted a study that concentrated on the impact of mergers and acquisitions on financial performance of non-recorded commercial banks in Kenya. This research focuses on the profitability of non-recorded banks, which merged from 1994 to 2001 and utilized four measures of performance, which are benefit, return on assets, shareholders equity and total liability. The findings presumed that there was significant change in performance for non-recorded banks, which merged contrasted with non-recorded banks that did not merge inside a similar period. This affirms the hypothetical assertions that organizations derive a bigger number of synergies by merging than by working as individual outfits. With this outcome this specific research is a well structured therefore it's exceptionally important to the support of the research project.

Pazarskis, Vogiatzoglou, Christodoulou and Drogalas (2006) conducted a research on the effect of corporate merger over the working performance of Greece manufacturing acquiring company. In this study, sample of 50 Greeks manufacturing organizations are viewed that are listed on Athens stock market and the period taken from this study is from 1998 to 2002. This study utilized financial and non-financial variables to assess the financial performance. The findings shows that the performance of consolidated company reduces after merger, which is unique in relation to Ramaswamy and Waegelein (2003) who studied the long-term post acquisition performance of companies in Hong Kong and their study conclude that there is significant positive improvement of the post acquisition performance as compared to the pre acquisition. According to Usman, Mehboob, Ullah and Farooq (2010)

study the financial performance of the acquiring companies in Pakistan. To evaluate the financial position of merged manufacturing companies in Pakistan is the main aim of this paper. The study took a sample of 14 manufacturing consolidated companies and a sample of 14 matched control companies in other to evaluate their position. The results of this study demonstrated that the joined firms don't perform significantly in respect to the control firms. It is concluded that the merger don't significantly impact on financial performance of the merged company with respect to industrial peers.

Several different variables have been adopted when measuring financial performance. The main variable utilize in this project is return on assets, which is term as how firm's directors utilizing its companies assets in order to generate profit. Moreover, the second variable is return on equity which is the financial ratio that indicates to the amount of profit an organization made compared with the aggregate sum of shareholder equity contributed (Mboroto, 2013). Thirdly is earning per share, which is defined as the firms profit allocated to each outstanding share of common stock and which indicate firm's profitability (Wilkinson, 2013). Lastly is the net profit margin that can be known as the entire total income of a firm, which produced from their sales revenue that includes all cost of operation (Wilkinson, 2013).

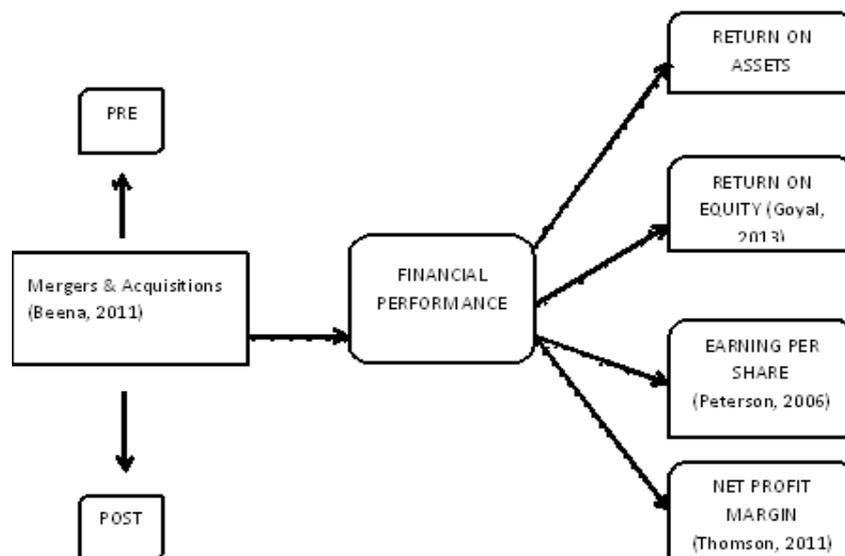


Figure 1: Conceptual Framework
Source: Authors own development based on various readings

2.2. Mergers & Acquisition and Return on Assets

Return on assets is considered as an important indicator in measuring company's efficiency through using its total assets under its control, and it's calculated by taking net operation income divide by firm's total assets. According to Hall and Weiss (1967) they consider firms return on assets as a measurement to gauge performance in order to examine profitability and size relationship (Dogan, 2013). Based on Khrawish (2011), ROA is a ration of firm's income to its total assets and having a positive significant on company's profitability. In auxiliary, Peterson and Schoeman (2012) tacit that the benefit of the organization's ability to produce income for a specific time span and Return on Assets is a general indicator that mirrors both the overall revenue and the proficiency of the establishment. ROA measures the efficiency with which the acquiring companies utilize its assets to generate profit (Ashfaq, 2014). This variable is used to measure the financial

performance of a particular company; whether there was a significant improvement of the monetary condition of the company after merger and acquisition (Njogo et al., 2016).

H1: *Mergers & Acquisition has significant impact on Return on Assets.*

2.3 Mergers & Acquisition and Return on Equity

The best measurement tool considered by investors for financial performance is Return on Equity. A firm with high return on equity is regarded as one capable of producing liquidity internally. Based on Khrawish (2011), the return on equity is the ratio of income after reduction of taxes divided by the total equity capital of the firm. This variable reflects how a company is effectively managing its shareholders funds therefore, the stronger the ROE of the firm the more effective its management is making use of the shareholders' funds. The main disadvantage of this variable is that it's very sensitive to change in financial gearing (Naba & Chen, 2014). According to Mishkin (2006), ROE ratio shows how gainful an organization is by contrasting its net income with its normal shareholder's value (Naba & Chen, 2014). Pazarskis et al. (2006) believe that when the merger and acquisition implemented, the value of the shareholder between the companies will be increased. Hence, the higher the proportion rate, the more effective administration is in using its value base and the better return are to shareholders (Naba & Chen, 2014). Mergers and acquisitions activities are the prior factors of improving financial performance (Pazarskis et al., 2006). If a particular firm has a high ROE, it indicates that the company probably be one that is fit for creating money inside and by this, the higher the ROE, the better the organization is as far as the profit generation.

H2: *Mergers & Acquisition has significant impact on Return on Equity*

2.4. Mergers & Acquisition and Earning per Share

According to Black, Wright and Davis (2011), this variable is considered has the most powerful tool used in measuring investment analysts. Companies that save its EPS rather than paying them as dividends always incur higher EPS from year after year and which will able to uphold the firm's capital structure without borrowing and leads to rise in assets with greater EPS and higher earning. As per Chatfield, Dalbor, & Willie (2008) shareholder value for the firm is sturdily influenced by analysis appraisals of the firm's future earnings per share (EPS). However, pure accounting treatment and its subsequent effect on EPS, whether increasing or decreasing, following a merger or acquisition are also irrelevant. Related examples from mergers and acquisitions where EPS may change without conclusive value relevance are whether the transaction is accounted for by the amount of asset step-ups (Bergquist & Vesterberg, 2015). Rappaport (2005) argues that analysts put a lot of emphasis on earnings when forecasting performance and managers can go to great lengths to meet earnings expectations. The same holds true when evaluating mergers and acquisitions (Bergquist & Vesterberg, 2015).

H3: *Mergers & Acquisition has significant impact on Earning per share*

2.5. Mergers & Acquisition and Net Profit Margin

This is the profit which is obtain from when interest and taxes is been deducted from the gross profit in other words it's the profit generated from all the phrases of the venture. Therefore according to Thomson (2011) and organization with a consistently high net margin shows that the firm with one or more competitive advantages to their competitors and also provide the firm with a cushion in the event of downturns (Zollo & Kerrigan, 2012). Li and Pan (2013) tacit that the value of the combined firm will increase by doing merger and

acquisition rather than operating individually. Based on Maranjian (2009), when the companies are having higher margins, it reflects their strength. They have an advantage in competitive situation since high margin companies able to afford to lower prices which competitors will have pressure because of it (Maranjian, 2009). Furthermore, one proposal is that merger and acquisition regularly used as a strategy to prepare financing for marginally profitable start-ups as stated by Fluck and Lynch (1999). Other than that, merger and acquisition would enhance the value and efficiency of a company (Wang & Moini, 2012) and some scholars used NPM to gauge the profitability. The net profit margin is utilized to identify the significant progress of the financial condition of the company after merger and acquisition (Kausar and Saba, 2011).

H4: *Mergers & Acquisition has significant impact on Net Profit Margin*

3. METHODOLOGY

3.1 Research design

This research paper adopted descriptive and explanatory design, which used to determine the causal effect between mergers and acquisition on the financial performance of UK companies in 2011. Causal research design is consistent with the study's objectives and questions, which are to examine the impact of mergers and acquisition on firm's financial performance when it comes to return on asset, return on equity, EPS, Net income (Gay and Airasian, 2003). Furthermore, the data is gauged repeatedly overtime in other to answer the aim of the research therefore the study uses longitudinal data. This method repeats the measurement of the sample overtime so that the progress and changes can be tracked down. Therefore approaches such as cross sectional are not necessary because it uses data from various sample at each time while this method allows the sample to be used for an observation over time (Madrigal & McClain, 2012).

3.2 Data Collection Method

Secondary data collection method is applied in this research paper, in which the data are collected from firm's annual reports, financial statements of the different companies that involve in mergers and acquisitions ranging from five years pre and post mergers and acquisitions. Although secondary data can be a suitable source of information to help frame and answer the research questions, Sanders et al. (2009) tacit that initially secondary data would appear to be significant, however upon nearer investigation are not fitting to your research objectives and in light of this we should be cautious while choosing your secondary information sources and their legitimacy (Lopez, 2013). The total population of this study is 610 transactions of mergers and acquisition that has taken place in 2011 and are listed in the London stock exchange.

Table 1: The Illustration of the sample size

Stock Exchange	Number of mergers and acquisition in 2011 (UK)	Sample size
London Stock Exchange	610	40

The sample size of the study is 40 companies, which are picked proportionally from the total population in the stock exchange and the data will be collected from year pre-merger 2006-2010 and post-merger 2012-2016. The sampling method adopted in this study is convenience sampling, which is a form of non-probability method and referred to as data that is easily available and collected (Kothari, 2004). This method was used due to the financial

information of some merged companies was not easy to obtain from their annual reports, so firms were chosen due their availability of five years data before and five years after merged which was required for the study (Latham, 2007).

3.3 Ethical issues and Accessibility

For the ethical issues, ethical consideration in research is important in order to avoid any errors; prohibitions against fabricating, misrepresenting research data promote the truth and minimize error as well as falsifying (Resnik, 2015). As a secondary research the ethics issues are limited since it's not involving practices like interviews and survey which is human behavior, so therefore the only issues that will be taken into consideration is legal access and patents to the access books and articles which will be prevented with the help of references and citations (Smith, 2003). Therefore statistical information collected from this research project is easily access because it's obtained from the firm published annual reports and financial statements, which is posted in the company's websites and magazines.

3.4 Data Analysis Plans

The data should be analyze and interpreted in a way that can be easily comprehended by any rational person so that it can be meaningful. In this study, a Descriptive statistics method is adopted in order to analyze the data that gives graphic and numerical process to summarize a collection of information in a precise, clear and understandable way with the aid of SPSS software. Siers (2010) posit descriptive statistics as an instrument with small outcome when sample of the data is limited. In auxiliary, T-Test Statistic is applied in order to establish the association between pre-post merger and acquisition performance. This T-Test is utilized to compare the real sample mean with the hypothesized population mean and the importance of this test is to determine whether the average mean is similar before and after observation (Harmon, 2011). Thereby, this t test is suitable to be applied to avoid smaller number of subjects since finding subjects is difficult and time-consuming. Plus, the probability of having erroneous term is low and has considerable economic value (Price, 2000). SPSS package is used to run the raw data and it is simpler to discover statistical test, which are quicker and less demanding essential capacity access like descriptive statistics (Norusis, 2008).

4. DATA ANALYSIS AND FINDINGS

The target population of this project is 3394 firms that have mergers in UK in 2011 and the sample population size is 40 companies listed in the London Stock Exchange.

Convenience sampling will be adopted to draw the sample with the help of SPSS software to run the data collected. The data will be analyzed through the help of a Sample t-test statistics to gauge the significant of the variables (independent and dependent) of the study.

4.1. Descriptive Statistics

Table 2: Descriptive means

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-ROA	9.80	194	12.03	.863
	Post-ROA	1.32	194	56.06	4.02
Pair 2	Pre-ROE	54.64	194	175.86	12.63
	Post-ROE	10.81	194	144.14	10.35
Pair 3	Pre-EPS	5.25	194	21.453799	1.54
	Post-EPS	9.06	194	34.33	2.46
Pair 4	Pre-NPM	9.63	194	25.48	1.83
	Post- NPM	8.29	194	16.05	1.15

4.1.1 Return on Assets

By looking at the table above, the first Column states that pre-merger Return on Assets of firms is having an average mean of 9.80 with a standard deviation of 12.03 while in the other hand the mean value for post-merger is 1.32 with a standard deviation 56.06. This clearly signify there is a drastic reduction of about 8% of firm's return of assets from pre-merger to post merger. This significant decline maybe has a result of decline of management efficiency in employing available assets to generate earnings. The results is having similar consistent with that of Agrawal (2013), Yeh & Hoshino (2002), Kemal (2011), Ooghe et al. (2006) and Ismail et al. (2009). This shows that there is a hindrance for companies to buy other firms because there would be a decline in their return on assets (Dilshad, 2013).

4.1.2 Return on Equity

The result in the above table illustrate that the average mean on Return of Equity of firms on Pre-merger is 54.64 with a standard deviation of 175.86 while that of post mergers is having an average mean value of 10.81 with a standard deviation of 144.14. It's clear that firms return on equity trend drop significantly from 54.64 to 10.81 which is 44%, which maybe as a result of management of the firms not deploying the shareholders' capital in other to generate more return on equity or also it maybe the financial cost firm incurred when taking loans from financial institutions. The outcome is similar to research done by Reddy, Nangja and Agrawal (2013) and Kemal (2011) who found out companies return on Equity drop significantly after a merger and acquisition.

4.1.3 Earnings per Share

By looking at the table above, it's shown the average mean earning per share of companies before merger has 5.25 with a standard deviation of 21.45, and after the merger earning per share with an average mean of 9.06 with a standard deviation 34.33. This indicate that firms earning per share was lower before mergers but increase around 3% after the mergers and acquisition maybe due to companies going through buyback programs, number of outstanding share decrease, or firms has raised fresh Capital in the business. Masud, (2015); Khuram, (2014); and Raiyani, (2010) found out similar findings that firm earning per share increase significantly after a merger.

4.1.4 Net Profit Margin

In accordance to the above table, it illustrate the average mean of Net profit margin as 9.63 with a standard deviation of 25.48 before merger of companies, but after the merger the average mean change to 8.29 with a standard deviation of 16.05. This shows that the net profit margin of the companies is having little significant on Pre and Post-merger because it dropped around 1%. This reduction of firms Net Profit Margin maybe due to High Fixed business cost, devaluation of inventory or even the increment of Price of goods (Avenir, 2003). However this result is the same with that of Ooghe et al. (2006); Bhabra and Huang (2013) who did a research on Firms Net profit margin and found little significant on firm performance.

4.2. Paired Sample Correlation

Table 2: Correlation Analysis

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Pre-ROA & Post-ROA	194	0.083	0.247
Pair 2	Pre-ROE & Post-ROE	194	0.281	0.000
Pair 3	Pre-EPS & Post-EPS	194	0.859	0.000
Pair 4	Pre-NPM & Post-NPM	194	0.265	0.000

According to the table above it seen that the paired correlation value of the variable return on assets before and after merger is recorded to be 0.083 and a significant value of 0.24 which is higher than significant level of 0.05. This signify that return on assets is having a positively correlation with pre-post mergers and the strength among the variables is very weak which is above the significant level of 0.05. The finding show firms assets might be having overcapacity of assets were assets are left idling and not fully utilized or firms fixed cost been too high. However research finding is similar to that of Hair (2006), that correlation value 0.24 is having no correlation or weak relation between variables.

Furthermore, return on equity paired correlation value before and after merger is 0.28 and a significant level of 0.00, which is below the required level of 0.5. With this results it seen that return on equity is having a positively correlation coefficient with pre and post-merger and the strength of the variable is highly significant with a probability value of 0.00 which is below the significant level. The results interpret that firms that undergone mergers and acquisition was depending mostly on equity experiences effective efficiency ratios and this findings is similar with that of Hair (2006), Chinaemerem and Anthony (2015).

In addition, the paired correlation value of Earning Per share is 0.85 before and after merger and a significant level of 0.00 which is very strong significant. The result shows that earning per share is having a positively correlation with merger variable and having a highly significant relationship with pre and post-merger. The result is similar with Khuram (2014) who found out earning per share increase significantly after a merger because firms Revenue adjust and Net profit also increase.

The relationship between Net profit margin and pre-post mergers and acquisition is positively correlated and the strength among the variable is very weak with a value of 0.26 and the value of significant is 0.00 with is highly significant because it's below the level of 0.05. This maybe as a result of companies putting a lot of cash in the business, or the firms

may have reduced their total fixed cost. The finding is similar with that of Akinbuli and Kelilume (2013) who found a positively significant on firm's Net profit margin.

4.3. Paired Sample (T- Test)

Table 3: Paired Samples Test

Paired Samples Test									
		Paired Differences					T	df	Sig. (2-tailed)
		Mean	SD	SE	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreROA - PostROA	8.488	56.34	4.045	.5104448	16.4673	2.099	193	0.037
Pair 2	PreROE - PostROE	43.830	193.5	13.89	16.41957	71.2415	3.154	193	0.002
Pair 3	PreEPS - PostEPS	-3.811	19.32	1.387	-6.548228	-1.07509	-2.747	193	0.007
Pair 4	PreNPM - PostNPM	1.333	26.26	1.885	-2.385897	5.05346	0.707	193	0.480

Hypothesis 1 :(Accepted)

According to the table above, its illustrated the mean value of return on Assets pre and post mergers and acquisition is 8.48, the T value as 2.09 and the significant (2- tailed) analysis value 0.037, which is below than the level of significant 0.05 (Blackwell, 2008). Furthermore, this outcome determines that return on asset of companies is having a significant impact between merger and acquisition activities. This finding is similar from that of Yeh and Hoshino (2002), and Ismail et al. (2009) who found out the ROA of merged firms in Philippines decrease significantly after the merger.

Hypothesis 2 :(Accepted)

Moreover, the Return on Equity's mean value of companies before and after mergers and acquisition is 43.83 with a T value of 3.15 and a 2 tailed test (Probability) value of 0.002 which is really below the significant level of 0.05. The outcome illustrated that return on equity is having a high significant between mergers and acquisition. In addition some study carried by Knapp et al. (2005) stated that firms return on equity increase during a post-merger is because the firm looked into to their operational cost and effectively managed other related cost. Moreover, this study is similar with that of Kithitu et al (2012), and Mahesh and Prasad (2012) who concluded Return on equity of companies have significant on merger. On the other hand Masud (2015) and Agrawal (2013) challenged these findings.

Hypothesis 3 :(Accepted)

In accordance with the above table, the standardized mean of Earning per share variable is recorded as -3.81 with a T- test of -2.74 and a significant value of 0.007, which is below the scale of 0.05 significant level. The result shows that earning per share is found to have a significant negative relationship with pre and post-merger and acquisition. Some studies from Liargovas and Repousis (2011); Ahmed and Ahmed (2014) found similar outcomes of Earning per share increasing after a merger.

Hypothesis 4 :(Rejected)

Moreover, mergers pre and post net profit margin record an average mean value of 1.333 with a T –test value of 0.707 and an insignificant probability value of 0.480 that is above 0.05, which is the significant level. This conclusion displays that net profit margin of firm is having insignificant relationship on mergers and acquisition. Liargovas and Repousis (2011) concluded on a similar research that net profit margin of firms reduces significantly

after a merger, while consequently Nangja and Agrawal (2013), concluded on the other way round.

5. DISCUSSION OF FINDINGS

H1: Mergers and acquisition has a significant impact on ROA

Return on assets is seen having a probability of 0.037, which is significant on merger because it's below the significant level of 0.5. The descriptive table shows ROA reduces significantly from the time of merger and after the merger from 9.8 to 1.3 on mean. This is because acquired firms didn't expand their operational cost after the merger so they build on utilizing their resources and also companies extensively use their discretionary accruals prior to the merger and acquisition. Market movement and economic growth of the UK economic was also an influence of the decrease of return on assets, therefore return on assets decrease significantly after the merger. Studies done by Yeh and Hoshino (2002), and Ismail et al. (2009) in the Philippines manufacturing sector and concluded firms return on assets reduces after mergers and acquisition.

H2: Mergers and acquisition has a significant impact on ROE

Companies' return on equity probability value is 0.002, which is highly significant on mergers but the descriptive table illustrates that firm's return on equity decrease significantly after merger from 54.64 to 10.81, which is 44% reduction. The UK firm build on their profitability and expanded their operational cost after undergoing the merger, the high significant of return on equity is also has a result of companies making greater reserves accumulation, safeguarding shareholders value and improving management of funds. Khrawish (2011) concluded return on equity of firm's decreases after acquisition of companies.

H3: Mergers and acquisition has a significant impact on EPS

The companies earning per share is having a probability value of 0.007 but a negative relationship value of -3.81, which is weak on mergers and acquisition. It's illustrated in the descriptive table that earning per increase 3% after the merger. This increment of earning per share is due to some factors like the firms going through buyback programs where the companies share is been sold out by their promoters and also the firms had made a lot of sales after the merger which increase its Operational Profits. The reason is also after a merger firms invested in other projects therefore their revenue incline and share earnings increases. Ahmed and Ahmed (2014) conducted studies on earning per share on US companies and concluded that the share of shareholders increases significantly after a merger.

H4: Mergers and acquisition has a significant impact on NPM

Companies' net profit margin probability value is 0.48, which is above the normal significant level of 0.5 and the descriptive table show the EPS reduces around 1% from 9.63 to 8.29 after the merger. This decline of earning per share is due as a result of firm complex organizational structures and the lessened managerial efficiency that leading to losing control affect the company efficiency of M&A toward performance (Ravenscraft and Scherer, 1989). And also another analysis is done by Mahesh and Prasad (2012) that firms external factors together with its internal factors such as higher expenses and financial charges, non-strategic decision from managers and operational inefficiency affects net profit margin negatively and results to a significant lost. On the other hand Nangja and Agrawal (2013), says net profit margin increased after mergers when they conducted a study on Indian pharmaceutical industry.

Table 4: Hypotheses

Hypotheses	Significant level/ Results	Explanation
H1: Mergers and acquisition has a significant impact on ROA	0.037 Accepted	The P-value is 0.037, which is below the significant level of 0.05. This illustrates mergers & acquisition is significant on ROA.
H2: Mergers and acquisition has a significant impact on ROE	0.002 Accepted	The P-value is 0.002, which is below the significant level of 0.05. This illustrates mergers & acquisition is significant on ROE.
H3: Mergers and acquisition has a significant impact on EPS	0.007 Accepted	The P-value is 0.007, which is below the significant level of 0.05. This illustrate mergers & acquisition is significant on EPS
H4: Mergers and acquisition has a significant impact on NPM	0.480 Rejected	The P-value is 0.480, which is above the significant level of 0.05. This illustrates mergers & acquisition is insignificant on ROA.

6. CONCLUSION AND RECOMMENDATION

This study was carried out mainly to examine and analyze the effects of mergers and acquisitions on the financial performance of UK companies in 2011, in which the variables taken are Return on assets, Return on equity, Earning per share and net profit margin. The sample size of 40 companies that has undergone mergers and acquisitions in United Kingdom is selected from the 610 mergers and acquisitions transactions. Thereby, in this section, a subsequent discussion is done to investigate the impact of the research objective are accomplished. The initial objective is to examine the impact of mergers and acquisitions on ROA and by referring to the paired sample test, the results shows that the total mergers and acquired firms used in as sample size encounter significant reduction on return on assets before and after mergers. As per earlier chapter from the result we can see there is a reduction, which still have an effect on ROA. Therefore we can conclude that mergers and acquisitions will significantly effects the sperformance of firm hence returns on assets. The second objective is to examine the impact of merger and acquisition on return on equity and as for the paired sample analysis; the results signified that the merged firms in the sample size encounter a reduction in return on equity before and after mergers. Furthermore, the sample on the other hand ROE found a sophisticated level of significant than ROA, which means return on equity have more effect on financial performance. Thus it can be finalize that if the value of return on equity is significant then it's having an effect on mergers and acquisition activities.

As for the third objective is to examine the impact of merger and acquisition on Earning per shares, the results outcomes shows that merged firm from the study sample size encounter an increment on earning per share from pre to post merger and acquisition. However, there is no significant difference in EPS even before and after the merger although there is slightly increment but the significant is low. Moreover, the results are slightly difference before and after the merger and acquisition. There is an increment of 3% which means EPS increased after the mergers on the selected sample size. For the last objective, which is to examine the impact of merger and acquisition on Net Profit Margin and as for the paired sample analysis, the outcome illustrate that merged and acquired firms in the study sample size meet a decline on net profit margin before and after the consolidation which is from 9.63 to 8.29 respectively (1% decline). The T-test analysis shows an insignificant value

of net profit margin, which is 0.480 that is above the normal significant level of 0.5 and this shows that the net profit margin reduces significantly after a merger. Therefore, it can be concluded that if the value of net profit margin is insignificant then it's not having any effects on mergers and acquisition activities.

5.1 Recommendations

Recommendation given for future researchers is to investigate other factors to Measure Company financial performance as the variables used in the study is insignificantly impact mergers and acquisition. Variables such as gross profit, financial leverage, Return on capital employed, market share should be taken. The population sample size can be increased by future research with a wider time span, which will lead to a better outcomes as the effect can be seen only in the long terms and not in the short run. Furthermore, comparison between two stock exchanges from different countries is suggested so that a better result can be generated. Plus, two sectors from the same country can be taken and compared in order to see their differences during mergers and acquisition.

5.2 Limitations

Nevertheless, the appearance of limitation is a commonality in every study and this study also had it certain limits. First of all, the small sample size is chosen due to unavailability of information from certain companies. Moreover, the time span given for the research is five months, which is very limited for the study. In auxiliary, the complexity of obtaining the correct information is there since the writer is having inadequate experience regarding on how to manage tools to run and analyze the data.

5.3 Future Research Direction

For future research, it is advisable to have a wider approach by concentrate on a selected sector in order to have more significant results. Besides that, larger sample size and other financial variables such as gross profit margin, financial leverage, return on capital employed, market growth, sales growth should be taken so that better outcome can be generated. Other than that, two stock exchanges from different countries can be used for comparison and analyze them.

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