

Mergers and Acquisitions as a Growth Strategy in Business Organizations: A Study of Nigeria Banking Sector

EJOOR, Frank Wisdom
Department of Accountancy, Faculty of Management Sciences,
Enugu State University of Science and Technology, Enugu

OKECHUKWU, Elizabeth Uzoamaka
Department of Business Administration, Faculty of Management Sciences,
Enugu State University of Science and Technology, Enugu

IROEGBU, Ferdinand Ngene
Department of Accountancy, Faculty of Management Sciences,
Enugu State University of Science and Technology, Enugu

Abstract

This study examined mergers and acquisitions as growth strategy in business organizations: a study Nigeria banking sector. Three banks were used for the study. Secondary data were collected from the firms for ten years period, 2007- 2016. Bank size, gross earnings and turnover were proxies for mergers and acquisitions. Profit after Tax was the proxy for the growth. Data were analyzed using multiple regression analysis. Results indicate that mergers and acquisitions has positive and significant effect on banks' growth. The study recommends that Mergers and Acquisition should not be done out of desperation or necessity as was the case during the consolidation period but should be properly evaluated and carried out to ensure its success. The pros and cons should be weighed and it should be determined if that is the best option for the organization. Banks should be innovative in the development and marketing of their products in order to increase their market share and performance and also enhance the competitiveness of the banking industry. A strategically integrated acquisition programme should be put in place to ensure a successful merger/acquisition.

Keywords: Mergers, Acquisitions, Growth Strategy, Bank Size, Profit after Tax

1.1 Introduction

The relevance of banks in the economy of any nation cannot be overemphasized. They are the cornerstones of the economy of a country. The economies of all market-oriented nations depend on the efficient operation of complex and delicately balance systems of money and credit. Banks are an indispensable element in these systems. They provide the bulk of the money supply as well as the primary means of facilitating the flow of credit. Consequently, it is submitted that the economic wellbeing of a nation is a function of advancement and development of her banking industry (Obandan, 2010).

The financial deregulation in Nigerian that started in 1987 and the associated financial innovations generated an unprecedented degree of competition in the banking industry. The deregulation initially pivoted powerful incentives for the expansion of both size and the number of banking and non-banking institutions providing financial services led to increased competition amongst various banking institutions, and between banks and non-banking financial intermediaries.

As given in the address of Prof. Charles Soludo, Former CBN Governor in 2004, the economic adjustment in Nigeria had focused on structural and institutional reforms, which include the following (Soludo , 2005): Strengthened the institutional framework for the conduct of monetary policy, Bank recapitalization/consolidation, To possibly eliminate or reduce government ownership of any bank (to no more than 10 per cent), Improved transparency and corporate governance, Zero tolerance to misreporting and data rendition, Anti money laundering regulations, Implementation of based 11 principles and risk based supervision, Payments system reforms for efficiency-especially e-payment, Reforming the exchange rate management system (adoption of the wholesale), Restructuring Nigeria security Printing and Minting Plc.

Going by the main focus of the reform, bank recapitalization and consolidation stands out. The main method by which this aspect was achieved, was by directing individual bank to raise their capital base to a minimum of N25 billion or in alternative merge with other banks. This was achieved with the aid of mergers and acquisition. A merger refers to the combination of two or more organizations into one larger organization. Such actions are commonly voluntary and often result in a new organizational name (often combining the names of the original organizations). An acquisition, on the other hand, is the purchase of one organization by another. Such actions can be hostile or friendly and the acquirer maintains control over the acquired firm. Mergers and acquisitions differ from a consolidation, which id a business combination where two or more companies join to form an entirely new company. All of the combining companies are dissolved and only one new entity continues



to operate Okonkwo(2011). Gaughan(2007) also defines merger as 'a combination of two or more corporations in which only one corporation survives' while section 590 of the Nigerian Companies and Allied Matters Act 1990 defines it as "any amalgamation of the undertaking or any part of the undertaking of one or more companies and one or more bodies corporate".

1.2 Statement of the Problem

The world is in a state of flux, being influenced by the prices of globalization and technological changes and as a consequence firms are facing intense competition. To face the challenges and explore the opportunities, firms are going for inorganic growth through the use of merger and acquisitions.

M&A are arguably the most popular strategy among firms who seek to establish competitiveness over the rivals. There are various reasons firms going into merger and acquisitions, the main corporate objectives is to gain greater market power, gain access to innovative capabilities, maximize efficiency, synergy effects etc.

Muya (2006) carried out a survey of experiences of merger and found out that merger do not add significant value to merging firms Straub (2007) carried out a confirmatory research and found that the merger and acquisition play significant role in merging firms. Owing to the afore-mentioned mixed and inconclusive results, this study seeks to establish the effects of merger and acquisition as a growth strategy in Business organization with reference to Nigerian Banking institutions.

1.3 Objectives of the Study

The broad objective of this study is to appraise the concept of mergers and acquisition as a growth strategy in business organization focusing on the Nigerian banking sector. The specific objectives include the following:

- 1. To ascertain the effect of Bank Size on the profit after tax of the Nigerian banking sector.
- 2. To determine the effect of gross earnings on the profit after tax of the Nigerian banking sector.
- 3. To examine the effect of turnover on the profit after tax of the Nigerian banking sector.

1.4 Research Questions

The following research questions are formulated for the purpose of this study:

- What is the effect of Bank Size on the profit after tax of the Nigerian banking sector?
 What are the effects of gross earnings on the profit after tax of the Nigerian banking sector?
- 3. What is the effect of turnover on the profit after tax of the Nigerian banking sector?

1.5 Research Hypotheses

The following hypotheses are formulated for the purpose of this research project:

- 1. Bank Size does not have a significant effect on the profit after tax of the Nigerian banking sector.
- 2. Gross earnings has a significant effect on the profit after tax of the Nigerian banking sector.
- 3. Turnover does not have a significant effect on the profit after tax of the Nigerian banking sector.

REVIEW OF RELATED LITERATURE

According to Anthony (2008); a merger refers to the combination of two or more organizations into one larger organization. Such actions are commonly voluntary and often result in a new organization name (often combing the names of the original organizations) Umar (2009), a Merger is a transaction involving two or more companies in which shares are exchanged but in which only on company survives. Okpanachi (2011); A merger entails the coming together of two or more firms to become one big firm.

Thus, one can conveniently refer to a merger as the mixing of entities resources for growth and renovation. More over according to the CAMA (1990) states that merger means any amalgamation of the undertakings or any part undertaking of two or more companies or bodies corporate. According to Lafferty and Ubesie (2010); Merger in its broadest conception means the combination of two or more companies into one. Also in its narrower sense, merger is a formation of entirely new company to acquire the separate concerns necessitating the winding up of the latter company. Depamphilis (2011); is the combination of two or more firms in which all but one legally ceases to exists, and the combined organization continues under the original name of the surviving firms. Umoren (2007) defines a merger as an arrangement by which all the assets and resources of two or more companies and shareholders of the two companies are brought together under the control of one company which is owned jointly by the stakeholders of the original companies and shareholders of the two companies now become shareholders of the surviving company.

2.1.2 Acquisitions

According to Anthony (2008); acquisition is the purchase of one organization by another. Such actions can be hostile or friendly and the acquiree maintains control over the acquired firm. Umar (2009) acquisition is the purchase of a company that is completely absorbed as an operating subsidiary or division of the acquiring



company. Okpanachi (2011) defines acquisition as the taking over or purchase of small firm by a big firm, both of which are pursuing similar motives. Pandey (2005); defines acquisition as an act of acquiring effective control by one company over assets or management of another company without any combination of companies. Thus, in acquisition two or more companies may remain separate legal entities but the control of companies resides in one place.

2.1.3 Growth Strategy as it Relates to Mergers and Acquisitions

Growth Strategy is aimed at winning larger market share, even at the expense of short term earnings through diversification, product development, market penetration and market development.

- a) Market Penetration: One growth strategy in business where a small company decides to market existing products within the same market it has been using. The only way to grow using existing products and markets is to increase market share.
- b) Market Expansion: Often called market development, entails selling current products in a new market. Several reasons why a company may consider a market expansion strategy. First, the competition maybe such that there is no room for growth with the current market, if a business does not find new markets for its product; if cannot increase sales or profits. A small company may also use a market expansion strategy if it finds new uses for its product. For instance, a small soap distributor that sells to retail ones may discover that factory workers also use its product.
- c) Product Expansion: A small company may also expand its product line or add new features to increase its sales and profits. When small company's employ a product expansion strategy, also known as product development, they continue selling within the existing market. A product expansion growth strategy often works well when technology starts to change. A small company may also be forced to add new products as older ones become outmoded.
- d) Diversifications: this is where a small company will sell out products to new markets. This type of growth strategy can be very risky, marketing research is essential because a company will need to determine if consumers in the new market will potentially like the new products.

2.1.4 International Financial Reporting Standard 3 Business Combination

Onyekwelu (2017) International Financial Reporting Standard (IFRS 3) tentatively specified the financial reporting by an entity when it undertakes a business combination; it specifies that all business combination should be accounted for by applying ACQUISITION METHOD. Under this standard the pooling of interest, also known as the uniting of interest method of acquisition is no longer allowed. The acquisition method prescribes that the acquirer should recognize the acquire identifiable assets and liabilities at their fair values at the acquisition date. IFRS 3 also specifies that non-controlling interest in an acquire is measured either at value or at the non-controlling interests proportionate share of the acquire net identifiable assets. It specified that any future economic benefits that arise from assets that are not capable of being individual identified and separately recognized as goodwill.

IFRS 3 has it as its objective to improve the relevance, reliability and comparability of the information that a reporting entity provides in its financial statement about a business combination and its effects. To accomplish this objective, the standard established basic principles and requirements to guide the acquirer on how to: Recognize and measure the identifiable assets acquired, liabilities assumed and any non-controlling interest in the acquire. How to measure the goodwill or a gain from bargain purchase that may result from a business combination. Determine what information to disclose to enable the users of financial statements to evaluate the nature and financial effects of the business combination.

2.1.5 Benefits of Merger and Acquisitions

According to Emekekwue (2008), questions have been asked in why firms should want to merge their business with another firm when pride of ownership, enhanced status and undiluted control are motivating factor in business arrangement. A lot of reasons have been adduced for this, this reasons are subsumed under aggressive and defensive strategy. It is defensive, in it if aimed at wiping out competition by controlling important source or raw materials, capital or even marketing. A strategy is aggressive if is aimed at capturing markets that have hitherto proved difficult to penetrate. Attempts will now be made to analyze the benefits in detail.

1. Income Enhancement: A firm may discover that despite all effort on its side a strong sustainable and profitable competitive position cannot be produced without a change in the share of the market. A fundamental reason for acquisition is the desire to enhance income. A combined company may generate greater income than two separate companies. Increased income may come from improved marketing, strategic advantage, monopoly power and increased market share. As regards to marketing, a merger can bring about a significant improvement in previously ineffective media programming and advertising efforts, a weak existing distribution network and an imbalance product mix. As regards strategic advantage. This is a process of entering a new industry to explore perceived opportunities. On monopolizing the market, there are occasions when a company merges with another within the same industry to reduce competition.



- 2. Improve the value of Securities: Large growing firms have earnings capitalized at lower rates, which produces higher market values. The stock has better marketability, thus reducing risk and allowing for higher price earnings ratio. For instance, if the stock of Unity Bank and Diamond Bank Plc. its price earning ration stay at ten, then the capitalized value of Diamond Bank Plc. has doubled under such a circumstance, the management of portion Ltd will be under severe pressure to buy up all the share of Diamond Banks Plc.
- 3. Synergy: This is yet another reason for merging. This is a situation where the product of the merger is in the excess of the value of the aggregated value of the entire firm considered together. This is often referred to as the two –plus-two equals five effect. If a firm acquires another firm in the same industry, a lot of duplicated activities in the marketing, research, purchasing and administrative areas. For example. Financial benefits can be achieved in a merger between airlines by eliminating the duplication of existing facilities and runs. In an industrial organization, synergism can occur not only with elimination of duplicated operations but also with a rounding out of the product line in the hopes of increasing the total demand for the product of both companies.
- 4. Economic of scale: The concept of economics of scale can be defined as being realized when the firm is operating at or close to the minimum point of its average cost curve. Similarly, economics of scale occur when average cost declines with increase in volume. Economics of scale are possible not only in production, but also in marketing, purchasing, distribution, accounting even finance the idea is to concentrate a greater volume of activity with a given facility into a given number of people into a given distribution system etc. that is increase in volume permits a more efficient utilization of resources.
- 5. Use Excess cash: A company might find itself with more cash than it requires presently in business operations. It then looks for another business to buy. This is necessary because cash in sterile and its proper use is not made of such excess cash, the company might find itself over capitalized. It is widely argued that the only true justification for a merge is to achieve operating economics when the objective of the firm is to maximize the wealth of the shareholders.

2.1.6 Merger and Acquisition and Growth Strategy

In the world of business, merger and acquisition constitute a powerful growth tool used by companies to achieve long term growth and increased revenue or profitability. Mitchell and shake (2007) discover that synergy created by related merger and acquisition positively influences the profit streams of the firms. They believe that profit of firms tend to increase in relation to the degree of relatedness of companies in merger and acquisition activities. On the contrary, Mahesh (2007) finds that mergers and acquisition fail to make positive contribution in respect of return on capital employed. Guo and Petmeza (2012) find with UK data that to an extent, corporate acquisition are the effect of good performance rather than the cause. However, the findings also imply that acquisition also drive performance and growth.

Osamwonyi (2002) opines that merger and acquisition provide the faster ways to achieve growth or capitalize the firms accumulated assets in order to attain critical mass and strategic positioning. In making its entry decision, a profit- oriented firm would always compare the desirably of entry by internal means and entry by acquisition and then choose the means consistent with its corporate objectives of sustaining organization growth.

2.1.7 Merger and Acquisition – Advantages

According to Olutola (2000) when two firm merged together as one it will lead to lowest cost of capital, for instance, a big name is perceived by investors as financially balanced, may raise funds at lowest cost as a result of merging, the size will give the opportunity for rational diversification for the purpose of risk reduction. Whenever two firms merged together as one such merging will lead to a large firm since large firm have a greater degree of market influence than small ones, hence this larger firm will have monopoly power. Large scale production may lead to elimination of competition leading to increase sales. The good will of the company acquired can be enjoyed by the new owner; this will also lead to savings in the amount of money spent on fixed assets (capital expenditure).

2.1.8 Merger and Acquisition –Disadvantages

According to Olutola (2000) he opined that when two firm merge together it leads to large company as a result of this amalgamation there will be a problem of personnel. The problem of integration arises due to the fact that amalgamation does not stop at agreement but the new company has to be merged in such a way that it operated efficiently and contributes towards maximizing profits. Variation could exist in the accounting books of various companies and there is always a problem of reconciliation. Terms of agreement sometimes are not clearly reached although it is not always easy since one party has to forfeit one thing or the other for merger and acquisition to take place to all this and others is a huge disadvantage to merger and acquisition.



2.1.9 Why Merger and Acquisition Fail

Straub (2007), opined that numerous empirical studies in United State show high failure rates of merger and acquisition deals. Druker(1982). However, in his opinion stated that even a deal that is financially sound may ultimately prove to be disastrous if it is implemented in a way that does not deal sensitively with the company's people and their different corporate cultures. There may be acute contrast between the attitude and values of the two companies. Especially if the new partnership crosses national boundaries, in which case there may also be language barriers to contend with.

Similarly, Applebaum (2000), said that a merger or an acquisition is an extremely stressful process for those involved. Job losses, restructuring and the imposition of new corporate culture and identity can create uncertainty, anxiety and resentment among company's employees. Tetenbaum (1999), in his opinion said that companies often pay undue attention to the short term legal and financial considerations involved in a merger or acquisition and neglect the implication for corporate identity and communication. Factors that may prove equally important in the long run because of their impact on workers morale and productivity. Also, managers suddenly deprived of authority and promotion opportunities can be particularly bitter. Sometimes they may be specific personality clashes between executives in the two companies.

METHODOLOGY

3.1 Research Design

The researcher adopted ex-post facto. The choice of the ex-post facto design is because the research relied on already recorded events, and researchers do not have control over the relevant dependent and independent variables they are studying with a view to manipulation them(Onwumere, 2009). This study made use of secondary data covering a period of 10 years i.e. 2006 - 2015 obtained from the annual reports and accounts of the selected banks. The population of this study consists of all the commercial banks in Nigeria. There are a total of 23 commercial banks in Nigeria.

3.2 Sample Size/Sampling Technique

This study selected (3) three banks which includes Access bank, Sterling bank and Eco bank using judgmental techniques of sample selection. To be selected as a sample, the banks met the following criteria; To retain their identities prior to and after the merger and acquisition activities secondly, members of the group as a result of merger and acquisition did not exceed (3) three.

The organizations are a. Access bank acquired Intercontinental bank Plc; b. Eco bank took bold of Oceanic bank Plc. c.Sterling bank merged with Equatorial Trust bank Plc.

3.3 Description of Variables in the Model

Profit after Tax: Profit After Tax (PAT) is the net profit earned by the company after deducting all expenses like interest, depreciation and tax. PAT can be fully retained by accompany to be used in the business. Dividends, if declared, are paid to the share holders from this residue. The profit after tax is often a better assessment of what a business is really earning and hence can use in its operations than its total revenues. A company's after-tax profit margin is important because it tells investors the percentage of money a company actually earns per dollar of revenue.

3.4 Techniques of Estimation

Time series data covering a period of 10 years will be estimated using Co-integration technique of analysis which is an improvement on the classical ordinary least square technique (OLS). This technique was chosen as it depicts long-run economic growth. The following techniques of estimation are employed in carrying out the co-integration analysis

Unit Root Test

This is the pre Co-integration test. It is used to determine the order of integration of a variable that is how many times it has to be differenced or not to become stationary. It is to check for the presence of a unit root in the variable i.e. whether the variable is stationary or not. The null hypothesis is that there is no unit root. This test is carried out using the Augmented Dickey Fuller (ADF) technique of estimation. This test is carried out using the Augmented Dickey Fuller (ADF) technique of estimation. The rule is that if the ADF test statistic is greater than the 5 percent critical value we accept the null hypothesis i.e. the variable is stationary but if the ADF test statistic is less than the 5 percent critical value i.e. the variable is non-stationary we reject the null hypothesis and go ahead to difference once. If the variable does not become stationary at first difference we difference twice. However it is expected that the variable becomes stationary at first difference.

3.5 Model Specification

The following model was used to evaluate the study:



PAT=F (BS, GE, T)(1)
Where:
PAT=Profit After Tax (it is used as a proxy for Bank growth)
BS= Bank Size (it is used as a proxy for Mergers and Acquisition)
GE= Gross Earning (it is used as a proxy for Mergers and Acquisition)
T= Turnover (it is used as a proxy for Mergers and Acquisition)
In a linear regression form, it will become:
PAT= β o + β BS + β GE + β T + μ (2)
βo= Constant Term
β = Coefficient of BS
β = Coefficient of GE
β = Coefficient of T
μ= Error Term

DATA PRESENTATION AND ANALYSIS

This chapter is a presentation of results and findings obtained from field data, both descriptive and inferential statistics have been employed specifically using regression.

4.1 Data Description

Basic descriptive statistics as they concern the variables under study are presented in table 4.1 (FOR PRE-MERGERS AND ACQUISITIONS, 2000-2005)

Table 4.1: Description of the Characteristics of the Variables under Study (Access Bank)

V a	rial	le	M	e	a	n	M	e d	i a	n	S 1	ts.	. D	e v	S	k e	w	n e	S S	K	u r	t o s	i s	No	of Obs
P	A	T	1	2		0	1	2		0	1		3	6	-	0		0	1	1		0	4	6	_
В	K	\mathbf{S}	1	3.	9	9	1	4		4	1		7	2	-	0		0	2	1		8	8	6	
G	O	E	1	2		8	1	2 .	9	6	0		5	4	-	1		1	0	2		9	7	6	
T	O	R	1	3		7	1	3		8	0		7	5	-	0		7	1	3		1	7	6	

Author's Computations, 2017

Table 4.2: Description of the Characteristics of the Variable under Study (Eco bank)

V a	riab	l e	M]	e	a	n	M	e	d i	a	n	S	ts.	Dε	e v	S	k e	W	n e	S S	K	u r	tos	i s	No of Obs
P	A	T	1	1		2	2	9		5	5	3	3		1	1	-	0		6	3	1		5	1	6
В	K	S	1	2		4	7	1	0		7	1	3		2	6	-	0		6	8	1		5	0	6
G	O	E	1	0		7	4	1	0		7	8	0		1	1	-	0		5	4	2	1	. 7	1	6
T	O	R	1	0		2	9	1	0		6	2	0		6	9	-	0		6	1	1		5	2	6

Author's Extract from the full result in Appendix 1

TABLE 4.3 Description of the Characteristics of the Variable under Study (Sterling bank)

V	ariabl	le	N	1	e	a	n	M	e	d i	i a	n	S	ts.	. D	e v	S	k e	wne	s s	K	u r	t o s	i s	No of Obs
P	A	T	8		. 8	3	0	8		;	8	9	0		6	3	-	0	. 1	6	1		2	5	6
В	K	S	1	0		1	6	1	0		0	4	0		4	7	0		3	3	1		5	1	6
G	O L	E	1	6		0	5	1	5		9	9	0		3	5	0		2	6	1		6	7	6
T	O	R	1	1		6	6	1	2		0	9	1		0	3	-	1	. 6	5	3		9	3	6

Author's Extract from the full result in Appendix 1

Table 4.1 above shows aggregative average like the mean, median as well as measures of spread and variation like standard deviation. It also shows skewness which is measure of the degree of symmetry and kurtosis which is a show of the degree of peakedness of the observation. The results on skewness and kurtosis suggest a departure from normality. This is not a point that is strong enough to discredit the goodness of the dataset for the analysis in view.

Basic descriptive statistics as they concern the variables under study are presented in table 4.2. (FOR Post Mergers and Acquisition, 2000-2010)



Table 4.3: Description of the Characteristics of the Variables under study (Access Bank)

V a	riab	l e	M e a n	Median	Sts.Dev	Skewness	Kurtosis	No of Obs
P	A	T	5 8 . 6 9	6 3 . 7 4	8 4 . 9 1	0 . 9 8	2 . 1 9	1 1
В	K	S	1 5 . 1 9	1 4 . 6 7	2 . 0 5	0 . 3 5	1 . 7 9	1 1
G	O	Е	1 2 . 9 9	1 3 . 1 1	0 . 5 6	0 . 5 8	2 . 9 2	1 1
T	O	R	1 3 . 0 9	1 3 . 7 1	2 . 1 9	1 . 1 9	4 . 2 5	1 1

Author's Extract from the full result in Appendix 1

Table 4.3: Description of the Characteristics of the Variables under Study (Eco bank)

V a	riab	l e	M e a n	Мe	edia	n	$\mathbf{S} \mathbf{t}$	s.D	e v	Sk	k e w	nes	SS	K	u r	t o s	i s	No o	f Obs
P	A	T	1 1 . 3 5	9	. 8	2	3	. 0	9	1		0	6	2		5	0	1	1
В	K	S	11.99	1 1	3	3	2	. 3	7	1		4	3	3		4	2	1	1
G	O	E	1 1 . 0 0	1 0	. 8	5	0	. 2	9	0		2	9	1		5	5	1	1
T	O	R	10.49	1 0	. 7	7	- (0 . 5	9	0		5	9	1		9	1	1	1

Author's Extract from the full result in Appendix 1

Table 4.4: Description of the Characteristics of the Variables under Study (Sterling bank)

V a	riab	l e	Mean	Median	Sts.Dev	Skewness	Kurtosis	N o	o f	O b s
P	Α	T	9 . 4 1	9 . 4 1	0 . 8 7	- 0 . 3 2	1.91	1		1
В	K	S	1 0 . 7	1 0 . 7 9	0 . 7 2	- 0 . 2 8	1 . 5 2	1		1
G	O	E	16.63	1 6 . 5 1	0 . 8 6	0 . 4 0	1.69	1		1
T	O	R	11.23	1 1 . 7 0	1 . 2 5	0 . 2 8	1.61	1		1

Author's Extract from the full result in Appendix 1

Table 4.1 above shows aggregative averages like the mean, median as well as measures of spread and variation like standard deviation. It also shows skewness which is a measure of the degree of symmetry and kurtosis which is a show of the degree of peakedness of the observation. The results on skewness and kurtosis suggest a departure from normality. This is not a point that is strong enough to discredit the goodness of the dataset for the analyses in view.

5.1 Summary of Findings

The model in Access Bank Plc stated hypothesis have in pre-merger era that unit root test shows combination of 1 (1) and 1 (0) with relevant era of stationarity at the given level of significance. And the output of pre-merger was (PP) while post-merger was (ADF). Regression demonstrated output of the three banks under the pre-merger and post-merger.

In other words, bank size shows R^2 64%, Ad R 10%, F-st 1.19, Pro F-st 0.48 and Dw 2.05, so 36% variation is unexplained variables in respect of Access Bank while post-merger the goodness of the fit R^2 =64% R = 10%, F-sta = 1.19, Prob F-st = 0.48 and Dw = 2.05. at the end in consistency of this result there is positive significant impact between bank size and profit after tax.

The model in Eco bank Plc stated hypotheses in pre-mergers era and post-mergers era which their unit root test shows combination of 1(1) and 1(0) of stationarity at the given levels of significance. The output revealed that (PP statistics) and (ADF Statistics) was adopted. The multiple regression result shows that the goodness of the Fit in pre-mergers era $R^2 = 92\%$, Ad R = 80%, F Statistic = 7.8, Prof-Statistic = 0.116 and Dw 3.22, the 8% happened outside the model, but in post mergers the goodness of Fit indicate $R^2 = 96\%$, Ad R = 94%, F Statistic = 7.8, Prof-Statistics = 0.0000 and Dw = 2.09, therefore the model consistency indicate that there is positive significant impact between turnover and profit after tax.

The diagnostic test indicate that the mode is homoscedastic because the heteroskedasticity is subject to constant standard error and co-variance shows prob (F-st = 0.0000), F st = 3.13. The regression error specification test – reported F stastistic = 0.63 and F – Statistic = -.4. Evidently the model is BLUE (Best Linear Unbiased Estimator) and lies intact between the lower and the upper bounds. This clearly points to the stability of the model.

5.2 Conclusion

Descriptive statistics was applied in this study to checkmate normality test. Kurtosis was used to ascertain the peakness of the variables while skewness was used to ascertain the degree of symmetry of the variables. It was concluded that the model used in this study has goodness of fit as the R² of 57% suggests. This shows that 57% of the variation in the dependent variable is accounted for by the independent variables with an unexplained variation of about 53%. The F-statistics of 3.13 and the corresponding probability value of 0.03, indicates that the overall regression d statistically significant and can be used for meaningful analyses. The Durbin Watson Statistics of 2.83.



5.3 Recommendations

The following recommendations are made for this study:

- 1. Mergers should not be done out of desperation or necessity as was the case during the consolidation period but should be properly evaluated and carried out to ensure its success. The pros and cons should be weighed and it should be determined if that is the best option for the organization.
- 2. Banks should be innovative in the development and marketing of their products in order to increase their market share and performance and also enhance the competitiveness of the banking industry.
- 3. Mergers and acquisition have associated risks that if not properly managed can lead to failure. Inability of managers to handle the complex task of integrating two firms with different processes, accounting methods, operating culture, and misestimating of the value of the target firm by the buyer, must be avoided. A strategically integrated acquisition programme should be put in place to ensure a successful merger/acquisition.

References

Ajayi, O.A (2007). Banking: Law and ethics; Ibadan: Bash: Moses Printing & Publishing Co.

Akpan, A.B (2007). Effectiveness of bank capitalization and consolidation in building markets confidence. An assessment of customers perception in Nigeia, *Abuja Journal*, December 2.

Amedu, S.(2004). Corporate takeover, acquisition and merger. *Journal of Chartered Institute of Stockbrokers*, January- March.

Applebaum, S.H. and Yortis, H. (2000). Anatomy of a merger: Behaviour of organizational factor and process throughout the pre-during-post stages. Management Decision.

Augustine, N.K (2007) . Impact of Nigeria's bank consolidation on shareholder's returns. *African Institute of Economic Development and Planning*.

Bellow, M.S. (2004). Mergers and Acquisition as a Strategy for Business Growth in Nigeria. Paper presentation. Cartwright, S. and Cooper, C.L. (1996). Managing Mergers, Acquisitions and Strategic, Alliance 2nd Ed., Heinemann.

Charles, W.L (2002). International Business 3rd Ed., New York: MC Graw-Hill.

Cornett, M.M and Tehranina, H. (1992). Changes in corporate performance associated with Banks Acquisitioin. Journal of Finance and Economics. April edition.

Cowling, K.S and Cubbin, J. (1979). Mergers and Economic Performance, Cambridge University, .37

Emekekwue, P.E. (2016). *Corporate Financial Management*, 6th Ed.; Democratic Republic of Congo: African Bureau of Educational Sciences: Kinshasa

Gaughan, P.A (2007). Mergers, acquisition and corporate restructuring. 4thEd. New Jersey: John Wiley and Sons. Madubuko, C. U. (2010). Advanced financial accounting 1: Enugu: Computer Edge.

Muhammed, R. (2005). Understanding mergers and acquisitions, Business Day Newspaper, February 17th.

Muyiwa, O. (2007). Post consolidation challenges in Nigerian banking Sector CBN Briefs.

Nwude, C.E. (2003). Basic principles of financial management, 1st Ed. Enugu: Nigeria: Chuke Nwabude Publishers Ltd.

Obadan, M. I. (2012). Distress in Nigerian financial sector need for house cleaning by financial institutions. A Speech Delivered at the Closing Lunch of the 3rd Annual Banker's Conference.

Okonkwo, J. (2011) . Legal framework for mergers and acquisition. Central Bank of Nigeria. Available at www.cenbank.org/OUT/PUBLICATIONS/BSD/2005/LEGAL

Okpanachi, J. (2007). Comparative analysis of the impact of mergers and acquisitions on financial efficiency of banks in Nigeria. *Journal of Accounting and Taxation*, 3,(1).

Onyekwelu, L.U. (2017). Firm foundation in accounting and finance research, Enugu: His Glory Publications.

Onyekwelu, L.U. (2017). International accounting simplified: IFRS interpretations and application: Enugu: Kaltrox Images Ltd.

Rhoades, S.A. (1993). The efficiency effect of bank mergers. An overview of case studies of nine mergers, *Journal of Banking*, 22.

Soludo, C (2005). Beyond banking sector consolidation in Nigeria. A Paper Presented at the Global Conference on Nigerian Banking Reforms.

Straub, T. (2007). Reasons for frequent failures in mergers and acquisitions: A comparative analysis: Deutscher University Verlag, Wiesbadden.



APPENDIX ONE

Pre-Mergers and Acquisitions

TABLE 4.3.1: Summary of PP Unit Root Tests (Access Bank)

S	/	N	o	V a	riab	l e	PΡ	S t	a t	C	r i	t	i c	a l	V a	l u e s	Orde	of Integra	ation	@5%
										1			%	5	%	1 0 %				
1				P	A	T	- 1	0 .	. 7	-	0 .	8	3	- 6	. 4 8	-4.81	I	(1)
2				В	K	S	- 5	. 5	9		5.	6	0	- 3	. 6 9	- 2 . 9 8	I	(0)
3				G	О	Е	- 6	. 5	1		5.	6	0	- 3	. 6 9	- 2 . 9 8	I	(0)
4				T	О	R	- 7	. 0	2	-	8.	2	5	- 5	. 3 3	-4.18	I	(0)

^{**} Suggests Stationary at the given level of Significance

Author' extract from the full result in Appendix II

TABLE 4.3.2: Summary of PP Unit Root Tests (Eco bank)

S	/ N	0	V a	rial	ole	P	P	Sta	a t	C	r	i	t i	c a	. 1	7	V a	l u e s	Orde	er of Inte	egration	@5%
										1			%	5			%	1 0 %				
1			P	A	T	-	8	•	9	-	1	0	. 6	-	6		4	- 4 . 8 1	I	(1)
2			В	K	S	-	9	•	0	-	1	0	. 6	-	6		4	- 4 . 8	I	(1)
3			G	O	Е	-	1	0 .	6	-	3		5	-	6		4	- 4 . 8	I	(1)
4			T	О	R	-	8		4	-	8		2	-	5		3	- 4 . 2	I	(0)

^{**} Suggests Stationarity at the given level of Significance

Author's extract from the full result in Appendix II

TABLE 4.3.3: Summary of PP Unit Root Test (Sterling bank)

S /	N o	V a	rial	ole	P P S	tat	Crit	i	c a l V	/ a	l u e s	Orde	r of Inte	gration	@5%
							1	%	5	%	1 0 %				
1		P	A	T	- 1 .	6 6	- 1 0 . 6	6	- 6 . 4	8	- 4 . 8 2	Ι	(1)
2		В	K	S	- 1 0	. 6 7	- 0 . 1	7	- 6 . 4	8	- 4 . 8 2	I	(1)
3		G	О	Е	- 1 0	. 6 7	- 2 . 5	8	- 6 . 4	8	- 4 . 8 1	I	(1)
4		T	О	R	- 1 0	. 6 7	- 6 . 4	8	- 3 . 8	2	- 4 . 8 2	I	(1)

^{**} Suggests Stationarity at the given level of Significance

Author's extract from the full result in Appendix II

POST-MERGERS AND ACQUISITION

TABLE 4.4.1: Summary of ADF Unit Root Tests (Access Bank)

S	/ N	1	o	V a	rial	ole	P	P	St	a t	С	r	i t	i	c a	1	V	a	l u e s	Orde	er of Inte	gration (@5%
											1			%	5		(%	1 0 %				
1				P	A	T	-	5		8	-	2		8	-	4		2	- 3 . 5 9	I	(1)
2				В	K	S	-	6		5	-	5		2	-	4		1	- 3 . 5	I	(1)
3				G	О	Е	-	3		6	-	2		3	-	3		2	- 2 . 7	I	(0)
4				T	О	R	-	5		2	-	2 .	. 2	6	-	4		0	- 3 . 4	I	(0)

^{**} Suggest Stationary at the given level Significance

Author's extract from the full result in Appendix II

TABLE 4.4.2: Summary of ADF Unit Root Tests (Eco bank)

S	/ N	0	V a	rial	ole	P	P	S	t a	a t	С	r	i	t	i (c a	1	V a	1 ι	ı e	S	Orde	of Inte	gration (@5%
											1			Q	%	5		%	1	0	%				
1			P	A	T	-	5		0	3	-	5		5	2	-	4	1 2	- :	3.	5	I	(1)
2			В	K	S	-	1	2		9	-	4		4	2	-	3	2 6	- 2	. 7	7	I	(0)
3			G	О	Е	-	3		3	8	-	2		9	4	-	2	0 1	- 1	. 5	9	I	(1)
4			T	О	R	-	4		5	0	-	4		4	2	-	3	2 6	- 2	. 7	8	I	(1)

^{**} Suggests Stationary at the given level of Significance

Author's extract from the full result in Appendix II



TABLE 4.4.3: Summary of ADF Unit Root Tests (Sterling bank)

S / 1	N o	V a	rial	ole	P	P	S	t a	a t	C	r	i	t i	c	a 1	V a	. 1	u e	S	Orde	r of Inte	gration (@5%
										1			%	5		%	1	0	%				
1		P	A	T	-	3		7	4	-	4		4 2	-	3	3 3	-	2 . 7	7	I	(1)
2		В	K	S	-	5		5	2	-	2		1 3	-	4	1 1	-	3 . 5	2	I	(1)
3		G	О	Е	-	4		9	8	-	5		8 3	-	4	2 5	-	3 . 5	9	I	(1)
4		T	О	R	-	5		5	2	-	2		1 1	-	4	1 1	-	3 . 5	2	I	(1)

^{**} Suggest Stationary at the given level of Significance Author's extract from the full result in Appendix III

PRE-MERGERS

TABLE 4.5.1: Summary of Regression Estimation (Access Bank)

V	ariabl	e	Coefficie			t-Statistic	Pro-v	Exn-Sign	Actual Sig
_								LAP DIGIT	1101441 515
P	Α	T	1 3 . 9	9	0 . 7 0	19.89	0.0400	+	+
В	K	S	1 3 . 9	9	0 . 7 0	1 9 . 8 9	0.0000	+	+
G	O	Е	4 0 . 6	1	68.53	5 . 9 3	0.0000	+	+
T	O	R	1 3 . 7	2	0 . 3 1	4 4 . 5 8	0.0000	+	+
R		2	6 4	%	$A d R^2$	1 0 %			
F	- S	t	1 . 1	9	Pro F-st	0 . 4 8	D W	2 . 0 5	
Αp	pendix	HI							

TABLE 4.5.2: Summary of Regression Estimation (ECO BANK)

	, , , , , , , , , , , , , , , , , , ,					
Variable	Coefficient	Std-Error	t-Statistic	P r o - v	Exp-Sign	Actual Sig
LNPAT	1 2 . 4 7	1 . 3 3	9 . 3 8	0.0002	+	+
LNBKS	1 2 . 4 7	1 . 3 3	9 . 3 8	0.0002	+	+
LNGOE	1 0 . 7 4	0 . 0 5	2 3 7 . 3	0.0000	+	+
LNTOR	1 0 . 2 9	0 . 2 8	3 6 . 2	0.0000	+	+
R	9 9 %	$A d R^2$	9 9 %			
F - s t a t	1 5 1 1 . 5	Pro F-st	0.00006	D W	1 . 5 7	

Author's Extract from the full regression result in Appendix III

TABLE 4.5.3: Summary of Regression Estimation (Sterling BANK)

Variable	Coefficient	Std-Error	t-Statistic	P r o - v	Exp-Sign	Actual Sig
LNPAT	8 . 8 0	0 . 2 6	3 4 . 4 5	0.0000	+	+
LNBKS	1 0 . 1 6	0 . 1 9	5 2 . 5 8	0.0000	+	+
LNGOE	1 6 . 0 5	0 . 1 4	1 1 1 . 4	0.0000	+	+
LNTOR	1 1 . 6 6	0 . 4 2	2 7 . 6 4	0.0000	+	+
R ²	9 2 %	A d R^2	8 0 %			
F-stat	7 . 8	Pro F-st	0 . 1 1 6	D W	3 . 2 2	

Author's Extract from the full regression result in Appendix III

From Table 4, it can be established that the model has goodness of fit the R² of 62% suggests. This shows that 62% of the variation in the dependent variable is accounted for by the independent variables with an unexplained variation of about 38%. The F-statistics of 3.9 and the corresponding probability value 0.06 (Appendix II), indicates the overall regression is statistically significant and can be used for meaningful analyses. The Durbin Watson Statistics of 2.41 (Appendix III),

POST-MERGERS:

TABLE 4.6.1 Summary of Regression Estimation (ACCESS BANK)

Variable	Coefficient	Std-Error	t-Statistic	P r o - v	Exp-Sign	Actual Sig
LNPAT	1 3 . 9 9	0 . 7 0	1 9 . 8 9	0.0000	+	+
LNBKS	1 3 . 9 9	0 . 7 0	1 9 . 8 9	0.0000	+	+
LNGOE	4 0 . 6 1	6 8 . 5 3	5 . 9 3	0.0000	+	+
LNTOR	1 3 . 7 2	0 . 3 1	4 4 . 5 8	0.0000	+	+
R ²	6 4 %	A d R ²	1 0 %			
F - s t a t	1 . 1 9	Pro F-st	0 . 4 8	D W	2 . 0 5	



TABLE 4.6.2 Summary of Regression Estimation (ECO BANK)

Variable	Coefficient	Std-Error	t-Statistic	P r o - v	Exp-Sign	Actual Sig
LNPAT	1 1 . 3 5	0 . 9 3	1 2 . 2 0	0.0000	+	+
LNBKS	1 1 . 9 8	0 . 7 1	1 6 . 7 6	0.0000	+	+
LNGOE	1 1 . 0 0	0 . 0 9	1 1 1 . 2	0.0000	+	+
LNTOR	1 0 . 4 9	0 . 2 1	4 9 . 8 7	0.0000	+	+
R ²	5 7 %	A d R ²	3 9 %			
F - s t a t	3 . 1 3	Pro F-st	0 . 0 9 6	D W	2 . 8 3	

Author's Extract from the full regression result in Appendix III

From Table 4.6.2, it can be established that the model has goodness of fit as the R²of 57% suggests. This shows that 57% of the variation in the dependent variable is accounted for by the independent variable with an unexplained variation of about 53%. The F-statistics of 3.13 and the corresponding probability value of 0.03 (Appendix IV), indicates that the overall regression is statistically significant and can be used for meaningful analyses. The Durbin Watson Statistics of 2.83 (Appendix IV),

TABLE 4.6.3: Summary of Regression Estimation (Sterling BANK)

Variable	Coefficient	Std-Error	t-Statistic	P r o - v	Exp-Sign	Actual Sig
LNPAT	9 . 4 1	0 . 2 6	3 6 . 0 8	0.0000	+	+
LNBKS	1 0 . 7 4	0 . 2 2	4 9 . 2	0.0000	+	+
LNGOE	1 6 . 6 8	0 . 2 6	6 4 . 2	0.0000	+	+
LNTOR	1 1 . 2 3		2 9 . 7 7	0.0000	+	+
R ²	9 6 %	A d R ²	9 4 %			
F - s t a t	5 6 . 9 8	Pro F-st	0.0000	D W	2 . 0 9	

Author's Extract from the full regression result in Appendix III

From Table 4.6.3, it can be established that the model has goodness of fit as the R² of 96% suggests. This shows that 96% of the variation in the dependent variable is accounted for by the independent variables with an unexplained variation of about 4%. The F-statistics of 56.98 and the corresponding probability value of 0.0000 (Appendix III), indicates that the overall regression is statistically significant and can be used for meaningful analyses. The Durbin Watson Statistics of 2.09 (Appendix III),

1.1 Diagnostic test

Heteroskedasticity

In addition, a test for heteroskedasticity was carried out on the model to ensure that the assumption of homoscedasticity was not violated. From the result obtained, the x^2 and F-stat (Appendix IV) all indicate that the model is homoscedastic. The heteroskedasticity is subject to consistant standard error and co-variance show prob(f-st, 0.0000), f-stat=3.13. The regression error specification test as reported in Appendix V clearly shows that the model does not have an inclusion of any irrelevant variable neither does it have an omission of a relevant variable.

RESET (Regression error specification test)

The shows that is correctly specified because the t-statistic=0.63 and f-statistic=0.40.

More so, Fig 2, 2.1 and 2.2 below contains the cumulative sum of square graph following the recursive estimates. This is a measure of the stability of the model. Evidently the model is BLUE (Best Linear Unbiased Estimator) and lies intact between the lower and the upper bounds. This clearly points to the stability of the model.



1.2 Stability Test

Fig. 4.1: cumulative Sum of Squares Stability Test (ACCESS BANK)

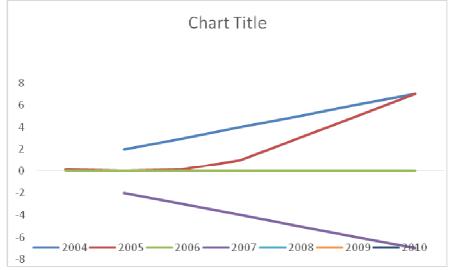


Fig. 4.2: Cumulative sum of Squares Stability Test (ECO BANK)

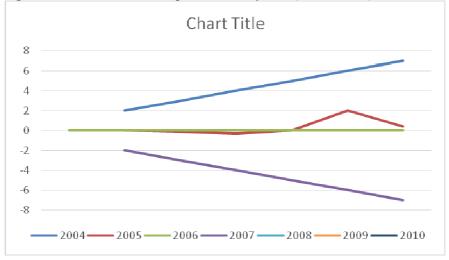


Fig. 4.3 Cumulative Sum of Squares Stability Test (Sterling Bank)

