

Mergers and Acquisitions on Operational Cost Efficiency of Banks in Ghana: A Case of Ecobank and Access Bank

Johnson Yeboah¹ & Ernest K. Asirifi¹

¹ School of Business, Takoradi Polytechnic, Ghana

Correspondence: Johnson Yeboah, School of Business, Takoradi Polytechnic, Ghana. E-mail: johnsonyeboah14@yahoo.com

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Abstract

In Ghana, Mergers and Acquisition strategy has been used widely in the banking sector. It is a strategy adopted by the organizations globally to meet the needs of recent dynamic business environment. This paper empirically examines the impact of mergers and acquisitions on the operational cost efficiency of banks in Ghana with specific emphasis of two banks; Ecobank and Access Bank-Ghana. If any improvements in operating efficiency from these mergers are large relative to any adverse effects of price changes created by increases in market power, then such mergers may be in the public interest. The financial data was analyzed by the use of Ratio analysis. Models that are commonly employed by bankers and other financial institutions in Ghana to compute the overall operational efficiency was also used. In terms of operational cost efficiency, results were incoherent for the two banks which the researchers strongly attributed to some fundamental limitations. However, the study revealed that mergers and acquisitions could potentially offer financing option for banks as well as promote economic efficiency through improvements in costs.

Keywords: cost, efficiency, Ghana, mergers & acquisitions, operational

1. Introduction

Banks contribute significantly to the efficiency of the money and capital markets of the economy through their intermediary role between the deficit and surplus units. In the early 1990s, financial-sector liberalization in Ghana was initiated, under the Financial Sector Adjustment Program (FINSAP), as part of a comprehensive macroeconomic adjustment program. The objective was to free the financial system from excessive government regulation in order to foster a competitive market-based system. Initiatives such as the liberalization of allocative controls on banks, strengthening of prudential regulation and supervision, restructuring of distressed banks were instituted. Recent developments include the adoption of International Financial Reporting Standards (IFRS) in line with international standards by Bank of Ghana as a way of reducing systemic risk; the establishment of Collateral Registry and Credit Reference Bureaus that seeks to promote transparency and ease credit accessibility, and the setting up of the Financial Intelligence Centre (FIC) to address money laundering and counter financing for terrorism. As a result, the Ghanaian financial landscape witnessed significant transformation, with more banks coming into the system.

The proliferation of banks in Ghana however resulted in a cluster of banks with relatively low capital base and depth that are inadequate to support significant levels of lending, especially on the international scene (Bank of Ghana, 2008). The 2008 bank recapitalization policy was thus predominantly spurred by concerns on the part of Ghana government for the threats of capital inadequacy and financial instability that confronted these clustered banks. This requirement was no doubt, a call for banks to increase their size either through mobilization of additional financial resources. Although other options such as capitalization of surplus funds, sale of shares or bonds potentially offer alternative sources of resource mobilization, the recent surge in M & As among Ghanaian banks suggests that the most preferred option for meeting the policy requirement is through M & As. For the purpose of this study, some specific banks that have gone through Mergers and Acquisitions in Ghana were selected (ECOBANK taking over The Trust Bank and Access Bank taking over Intercontinental Bank).

There are arguments for and against the benefits of Mergers and Acquisition in the literature with regards to cost efficiency. Some argue that M & As reduces availability of financial services whilst others are concerned with the reduction of competition and result in higher prices overall, for credit and credit-related services, Shields

(2004).

1.1 Problem Statement

Theoretically it has been argued that as firms grow and their scale of operation expand, their average cost of operation reduces up to an optimal point beyond which diseconomy set in. Thus firms become more efficient at absorbing fixed cost as they grow to an optimal size. However, if growth occurs through Mergers and Acquisition, factors such as diversification, management reconstitution and pooling together of complementary capabilities could further promote efficiency. On the contrary, factors such as costs associated with mergers and acquisitions, downsizing disruptions, culture clashes, and managerial turf battles and excessive use of market power could lead to inefficiencies.

The trade-off between these enabling and disabling factors determine, to a large extent, the success, efficiency and profitability of banks that have expanded through M & A. This has led to argument, in literature for and against the idea that firm growth through M & A leads to improved efficiency.

1.2 Research Questions

The following research questions were formulated to guide the study.

- Are Banks in Ghana better at controlling operational costs after Mergers and Acquisitions?
- Are Mergers and Acquisitions recommendable growth options for Banks in Ghana?
- To what extent has 2008 regulatory capital directive impacted on cost efficiency on banks integrated through Mergers and Acquisitions?

1.3 Objectives of the Study

The main objective of the study was to assess the extent to which mergers and acquisition have impacted on operational cost efficiency of selected banks in Ghana (Ecobank and Access Bank).

Other objectives include the following:

- To determine whether Banks in Ghana are better at controlling operational cost after Mergers and Acquisitions
- To assess whether M & As are the recommendable growth options for Banks in Ghana
- To ascertain the extent to which the 2008 regulatory capital directive has impacted on cost efficiency in banks after M & A.

2. Literature Review

2.1 Efficiency Theories

Substantial evidence exists in literature in support of bigger scale of operations. The theoretical argument for business expansion through mergers and acquisitions is efficiency gains through the implementation of operational improvements, replacement of inefficient management, rationalization of existing branch networks, etc. (Akoena et al., 2007) Following are some theories on efficiency gains through M&As.

2.2 Differential Efficiency Theory

According to this theory an acquiring firm will be able to increase its efficiency in the areas where the acquired firm is superior (Ivey, 1995). That is, if the management of firm A is more efficient than firm B (e.g. in processes and procedures) and if firm A acquires firm B, the efficiency of firm B is likely to be brought up to the level of firm A. The theory implies that some firms operate below their potential and as a result have below average efficiency. Such firms are most vulnerable to acquisition by other more efficient firms in the same industry. This is because firms with greater efficiency would be able to identify firms with good potential but operating at lower efficiency (Ivey, 1995).

2.3 Inefficient Management Theory

This simply implies that the management of one company in a potential M&A bid is performing below its potential. Management restructuring is a common phenomenon that accompanies M&A. It is commonly the case that the re-constituted management team is more effective and efficient at handling the helms of affairs of the newly formed organization.

2.4 Synergy

Synergy refers to the type of reactions that occur when two substances or factors combine to produce a greater effect together than that which the sum of the two operating independently could account for. The ability of a

combination of two firms can be more profitable than the two firms individually. Coyle (2010) therefore, concludes that companies engage in mergers and acquisitions to create synergies.

Synergy takes the form of revenue enhancement and cost savings. By merging, the companies hope to substantially reduce costs and improve revenue through staff reduction, economies of scale, complementary capability fitting, acquiring new technology, improving market reach, etc. Three forms of synergy have been categorized; financial synergy, operational synergy and strategic synergy. According to Sinkey (2002) M&A activities achieves synergy through economies of scale and scope, lower distribution or marketing costs or elimination of redundant assets.

2.5 Information Hypothesis

This contends that the bidders of M&A deals have private information about the target that permits them to identify undervalued firms (Sinkey, 2002). A key object of virtually all M&As is to create a merger whose value is greater than the sum of the individual units. Paying less for a firm of higher value is key to the achievement of this goal.

2.6 Strategic Re-Alignment of Changing Environment

It suggests that the firm use the strategy of M&As as ways to rapidly adjust to changes in their external environments. When a company has an opportunity of growth available only for a limited period of times low internal growth may not be sufficient. Example is the bank recapitalization policy in Ghana in 2008 which triggered a wave of M&As.

2.7 Diversification Hypothesis

This is where consolidated banks are able to effectively deepen the broaden their investment portfolio due to their larger size, prominent stature, greater geographical spread, and/broader industrial coverage, allowing for a better diversification of risks (Akhavain et al., 1997). Thus the market rewards merging firms for an improved diversification of loan risks by allowing them to hold higher loan/asset ratio for a slightly increased leverage ratio.

2.8 M&A Failures

Although mergers and acquisitions have the potential to boost the performance of the two companies involved the M&A through synergy, cost-reduction, expanded market size, improve competitiveness, among others, not all mergers and acquisition churn out the expected benefits (Straub, 2007). Failure has partly been attributed to the 'Hubris effect' in extant literature. This hypothesis contends that, managers look for acquisition of firms for their own potential motives and that the economic gains are not the only motivation for the acquisitions.

This theory is particularly evident in case of competitive tender offer to acquire a target. The urge to win the game often result in bidding for over-valued firms (Roll, 1986). Bidding firms are said to be infected by hubris when they tend to pay too much for their target firm. It is argued that so many acquisitions fall short of expectations because executives incorrectly match candidates to the strategic purpose of the deal, failing to distinguish between deals that might improve current operations and those that could dramatically transform the growth prospects of the company (HBR, 2011).

(Gadeish & Ormiston, 2003) identified five major causes of M&A failure:

- ❖ Poor strategic rationale
- ❖ Mismatch of cultures.
- ❖ Difficulties in communicating and leading the organization.
- ❖ Poor integration planning and execution.
- ❖ Paying too much for the target company.

They argue that the greatest of these factors is poor strategic rationale for carrying out mergers and acquisition activities. Poor strategic rationale by the acquiring firm or both firms involved in a merger will possibly influence a mismatch of cultures, communication difficulties, poor integration and poor execution, among others. The cost of these difficulties and challenges usually overshadows the benefits in synergy that consolidation brings to the new firm. (Lynch & Lind, 2002) attributes other reasons for merger failures to culture clashes, lack of appropriate risk management strategies, slow post - merger integration.

A major issue in poor strategic rationale as part of the consolidating firms' long term corporate goal is possibly the role of managerial intent in carrying out merger decisions. McDonald et al. (2005) indicates that in their

study on corporate strategies and mergers, ‘many CEOs appear happy to share the virtues of their latest acquisition, it appears few are keen to highlight their failed M&As’. There is also the risk of an overly optimistic view of the benefits of synergy which managers may attach to consolidation. In most cases, due diligence on credit risk assessment and corporate fit is poorly done. The result is complex challenges confronting the new entity and an overestimated benefit in synergy.

According to Straub (2007) the reasons for M&A successes or otherwise can generally be clustered under three fields; Strategic logic, Integration and Financial logic. The strategic school of thought argue that M&As are more likely to be successful, like the acquiring firm’s strategic decision to acquire a target firm sits well with the overall strategic direction (Jarillo, 2003). Research in this field has concentrated on factors such as the motives and the different types of combination, market power and economics of scale (Finkelstein, 1999). In contrast, the organizational school of thought (integration field) is concerned with the broad question of what effect acquisitions have on individuals and organizations. Research in this area commonly concentrates on analyzing the impact of M&A on people such as the cultural ‘fit’ and managerial ‘fit’ (Weber, 1996; Mark & Mirvis, 2000). Financial logic concentrates on the financial sense of M&As. Here the perspectives of the financial analyst on the value creation potentials of firm consolidation are considered.

Using four statistical methods Straub (2007) developed a framework for the three identified fields that shows that the performance of M & As is a multi-dimensional function. According to him, for a successful deal, the following key success factors for each identified field should be taken into account;

Strategic Logic: Reflection by market similarities, market complementarities, market power and purchasing power.

Organizational integration: Reflected by three determinants namely acquisition experience, relative size and cultural compatibility.

Financial /Price logic: Reflected by three determinants namely acquisition premium, bidding process and due diligence.

All these variables are presumed to affect performance either positively or negatively. Post M&A performance is measured by synergy realization, relative performance (compared to competition) and absolute performance.

It follows from the work of Straub (2007) and the theories reviewed so far that an acquiring firm:

- ❖ Achieves sync between its overall strategic direction and the strategic decision to expand operations through M&A.
- ❖ Manages the behavioral implications of the exercise to achieve a good cultural and organizational ‘fit’ and
- ❖ Is able to negotiate for a good price.

It is highly probable that the integration exercise will be a success.

A successful integration—herein seen as a net gain between the possible gains in operational efficiency of consolidation (resulting from replacement of inefficient management, structures, processes, etc.) and the possible operational efficiency losses (price hikes from undue market power, managerial turf battles, downsizing disruptions, high associated costs, etc.) – will potentially translate into an effective and efficient post-merger entity. An efficient firm will thus exhibit the following attributes among others:

- ❖ Offer range of products and services that delight customers.
- ❖ Deliver quality services to satisfaction and retain customers.
- ❖ Better control over operational and transactional costs.
- ❖ Less bureaucratic processes and procedures.
- ❖ Have efficient-oriented culture.
- ❖ Use modern technology to improve efficiency.

2.9 Efficiency in Literature

The concept of bank efficiency can be viewed from many perspectives (Akoena et al., 2012). Pure technical efficiency means the extent to which firms are able to attain maximum possible output with their input bundles at existing scale size. Scale efficiency is considering whether firms are producing as close to their most productive scale size as possible (Akoena et al., 2012). If firms do not generate output at a scale of operations which is closest to their most productive scale size, there exists scale inefficiencies which tend to increase the average costs of production.

Again, X-efficiency would be looking at how proficient management is at engaging resources to produce output that meet or exceed customers need at the least possible cost (Berger et al., 1993). The potential is greater for cost X-efficiency gains by moving closer to the 'best-practice' cost frontier where cost is minimized for a given output bundle. The X-efficiency empirical findings suggest that on average, banks have costs that are about 20% to 25% above those of the observed best practice banks. This result suggests that the cost efficiency could be considerably improved by a merger in which a relatively efficient bank acquires a relatively inefficient bank and spreads its superior management talent over more resources (Berger et al., 1993).

2.10 Efficiency and Profitability

The relationship between efficiency and profitability is one area that has received a lot of research attention (Soteiou & Zenios, 1997; Turati, 2003; Kumar, 2008). Demsetz, (1973) proposed the efficiency hypothesis that stipulates that a bank which operates more efficiently than its competitors gains higher profits resulting from low operational costs. He stated that higher profits of banks are not due to their collusive behavior but because of high efficiency level, which in turn, leads to larger market shares that banks possess. In other words, profitability of bank is determined not by the market concentration but by bank efficiency (Grygorenko, 2009). The equation below shows the relationship that exists between profitability and efficiency;

$$\text{ROE} = (\text{PAT}/\text{NI}-\text{BT}) * (\text{PBT}/\text{OP}.\pi) * (\text{OP}.\pi/\text{TA}) * (\text{TA}/\text{E})$$

$$\& \text{PM} = \text{NI} - \text{AT}/\text{NI}-\text{BT}) * (\text{NI}-\text{BT}/\text{OP}.\pi)$$

Where:

ROE = return on shareholders' equity;

PAT = Profit After Tax;

PM = Profit Margin;

NI –AT/NI-BT = Tax Efficiency;

PBT/OP. Inc = Operating Cost Efficiency;

OP.Inc/TA = Asset Utilization/turnover efficiency;

TA/E = Equity Multiplier.

The above equation (Sinkey, 2002) suggests that a firm's profitability is contingent, inter alia, upon how efficient it is at controlling its operational costs.

The ratio of Expense –to-Income (used as a proxy for operating cost efficiency) measures the overheads or cost of running the bank-the major element of which is normally salaries – as percentage of income and it is used to provide information on variation of bank cost over the banking system. According to the argument advanced by Kosmidou (2008), although the relationship between expenditure and profits appears straightforward implying that higher expenses mean lower profits and vice versa, this may not always be the case. The reason is that higher amounts of expenses may be associated with higher volume of banking activities and therefore higher revenues. It is expected that this variable will have a negative impact on performance because efficient banks are expected to operate at lower costs.

According to Humphrey et al. (1997) mergers and acquisitions could raise profits in any of three major ways. First, they could improve cost efficiency, reducing costs per unit of output for a given set of output quantities and input prices. Indeed, consultants and managers have often justified large mergers on the basis of expected cost efficiency gains. Second, mergers may increase profits through improvements in profit efficiency that involves superior combinations of inputs and outputs. Profit efficiency is a more inclusive concept than cost efficiency, because it takes into account the cost and revenue effects of the choice of the output vector which is taken as given in the measurement of cost of, efficiency. Thus, a merger could improve profit efficiency without improving cost efficiency if the reconfiguration of outputs associated with the merger increases revenues more than it increases costs, or if it reduces costs more than it reduces revenues.

Third, mergers may improve profits through the exercise of additional market Power in setting prices. An increase in market concentration or market share may allow the consolidated firm to charge higher rates for the goods or services it produces, raising profits by extracting more surplus from consumers, without any improvement in efficiency.

Humphrey et al. (1997) however found in their work that profit efficiency can improve, even though cost efficiency has not improved.

2.11 Measuring Bank Efficiency

In literature the measurement of bank performance (of which efficiency is but one) has been considered on two broad bases: financial and non-financial efficiency (Yeh, 1996). The financial approach to measuring operational efficiency uses financial statement variables such as expenses, profits, costs and revenue and various analytical techniques such as ratio analysis or the frontier approach. Financial analysts have traditionally used one or a combination of these approaches to advance their work (Yeh, 1996).

A common financial ratio that bankers use to measure the overall operational efficiency is the cost/income ratio (expense/income ratio). This is a measure that broadly expresses the operating costs incurred by the bank as a percentage of its operating income. The general intent is that if a bank has a cost/income ratio of, say, 48 per cent, then for each 100 units of operating income, 48 units go out in overall operating costs – with only part of those costs representing back office expenses or IT specific costs. The cost/income ratio can be applied to any entity but when it is specifically applied to a bank, it is an expression of the bank's total operating costs over its net interest income (interests earned on investments less the interests paid out to depositors) plus any other operating income such as fees and commissions. As a result, the ratio measures not simply the efficiency of its back office and its IT strategy but the efficiency of the whole bank, including its interest management policy, its investment policy and its investment in new products or delivery channels.

Although the frontier approach is said to offer a more reliable option to bank efficiency estimation than accounting ratios (Vitta, 1991), the latter could serve as a quick and easy tool for assessing a bank's financial performance. Financial ratios (a quantitative measure), when considered alongside non-financial measures, can offer a balanced way of assessing performance (Quinn & Rohrbaugh, 1983).

There are a number of studies in the literature that used non-financial measures to evaluate the effectiveness and performance of organization (Quinn & Rohrbaugh, 1983; Venkatraman, 1986). It is reported that a good measure of performance evaluation should be meaningful. It must reflect management's clarity about organization's current situation and its viability to achieve its goals. It should be manageable as it can be handled easily based on simple calculations and manipulation of data (Ernst & Young, 1995).

Non-financial measures offer four clear advantages over measurement systems based on financial data (Umar & Olantunde, 2011). First, is a closer link to long-term organizational strategies. Second, critics of traditional measures argue that drivers of success in many industries are "intangible assets" such as intellectual capital and customer loyalty, rather than the "hard assets" allowed on to balance sheets. Third, non-financial measures can be better indicators of future financial performance. Finally, the choice of measures should be based on providing information about managerial actions and the level of "noise" in the measures. Noise refers to changes in the performance measure that are beyond the control of the manager of organization, ranging from changes in the economy to luck: good or bad (Ittner & Larcker, 2000).

3. Methodology

The study is both descriptive and explanatory in purpose. The objective of the study was to assess how M & A has impacted on operational cost efficiency of selected commercial banks in Ghana, particularly, following the 2008 bank recapitalization. This presupposes that the data for the study should cover both pre and post M & A periods and preferably starting from 2008.

The study employed financial data analysis to assess cost efficiency of selected consolidated banks. The aim was to enable the researchers make a balanced assessment of efficiency performance (Saner, 1998).

Financial secondary data were extracted from the annual statements of comprehensive income statements of the selected banks. These statements were sourced from the banking supervision department of the bank of Ghana, the banks websites and the bank's headquarters. Data for pre and post consolidation periods, spanning five years (2008-2012) for the two consolidated banks were used.

The financial data was analyzed by the use of Ratio analysis. The study used models that are commonly employed by bankers and other financial institutions in Ghana to compute the overall operational efficiency. For example in estimating and reporting on the efficiencies of Ghanaian banks, Price Water Coopers-Ghana uses **Cost-Income Ratio** approach (Ghana Banking Survey reports) which is employed in this study. Annual percentage increment in Impairment costs and operational expenses (the components of operational cost) were also estimated to help understand which costs or expenses significantly fluctuates during mergers and acquisition restructuring.

$$\text{Operating Cost-Income Ratio} = \frac{\text{Total Operating Cost/Operation Income}}{\text{Operating Income}} = \frac{[\text{Assets Impairment Cost} + \text{Operational Expense}]}{\text{Operating Income}}$$

$$\% \text{Incremental Impairment Cost} = \frac{\text{Incremental Impairment Cost} \times 100}{\text{Initial Impairment Cost}}$$

$$\% \text{Incremental Expense Cost} = \frac{\text{Incremental Expense Cost} \times 100}{\text{Initial Expense Cost}}$$

4. Financial Data Analysis (Cost Efficiency Assessment)

Table 1. Operating costs analysis – Ecobank (amounts expressed in thousands of Ghana cedis)

	2012	2011	2010	2009	2008
OP. INC (GH¢)	432,448	231,519	180,162	159,888	107,189
Total OP. COST (GH¢)	236,263	128,900	89,504	87,199	63,298
P BT (GH¢)	196,185	102,619	90,658	72,689	43,891
P BT MRG (%)	45.37	44.32	50.32	45.46	40.95
COST-INC RATIO (%)	54.63	55.68	49.68	54.54	59.05
Components of Op. Cost					
Total OP. Cost (GH¢)	236,263	128,900	89,504	87,199	63,298
Op. Exp (GH¢)	210,948	122,743	83,742	77,681	57,505
Impairment (GH¢)	25,315	6,157	5,762	9,518	5,793
Incr. OP. Cost (GH¢)	107,363	39,396	2,305	23,901	29,564
Incr. OP. Exp (GH¢)	88,205	39,001	6,061	20,176	24,362
Incr. Imp. Ex (GH¢)	19,158	395	-3,756	3,725	5,202
Op. Exp (%)	89.29	95.22	93.56	89.08	90.85
Impairment (%)	10.71	4.78		6.44	10.92
Incr. Op. Cost (%)	83.29	44.02	2.64	37.76	87.64
Incr. Op. Ex (%)	71.86	46.57	7.80	35.09	73.51
Incr. Impair. Ex (%)	311.16	6.86	-39.46	64.30	880.20

Source: Bank's annual financial statements and researchers calculations.

Table 1 above shows the operating cost and its corresponding incremental costs of Ecobank spanning five years (2008 to 2012). Two broad subdivisions of operating costs; operating expenses and impairment of financial assets, and their corresponding incremental costs are also shown. Operating income was included to enable the researchers compute the ratio of cost to income (a proxy for estimating cost efficiency) and to also assess the impact of operating costs on the profit margins of Ecobank. The years were carefully selected to cover both pre-acquisition and post-acquisition period (Note: the acquisition exercise occurred between late 2011 and early 2012).

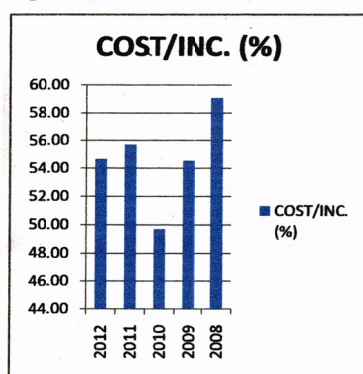
4.1 Pre-Acquisition Cost Performance (Ecobank)

The results indicate that in 2008, Ecobank recorded the highest cost-income ratio and incremental costs of 59.05% and 87.64% respectively, significantly driven by impairment costs (880.2% increases) over the previous year. Between 2008 and 2010, the bank improved upon its operational cost efficiency. The cost-income ratio decreased from 59.05% to 49.68% during this period. Operational expenses (46.57%). On the average the bank's cost-income ratio in the pre-acquisition period was 54.74% (Performance average for the four pre-acquisition years).

4.2 Post-Acquisition Cost Performance (Ecobank)

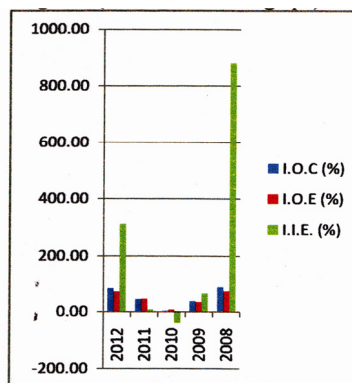
In 2012, the first post-acquisition year of operation, Ecobank incurred 83.29% increase in operational cost, mainly driven by impairment cost (311.16% increases). This increase was however matched by a higher

percentage increase in income (86.76%), thereby maintaining the cost-income ratio at a lower position (54.63%) than in 2011. The graphs below depict profit and cost margins (Figure 4.1a) and incremental costs (Figure 4.1b) for Ecobank over a five year term (covering pre - acquisition periods).



Source: Data Analysis

Figure 1a. Analysis



Source: Data Analysis

Figure 1b. Analysis

Figure 1a shows that in the pre-acquisition period, cost margin decreased between 2008 and 2010 (bettering cost efficiency) and sharply increased between 2010 and 2011. It also shows that between 2011 and 2012 (post-acquisition) cost margins dropped. This shows that with the exception of 2011 Ecobank demonstrated a year on year improvement in cost efficiency over the five years period considered, with the one post-acquisition period (2012) even better than the average of the preceding four pre-acquisition years. Figure 1b on the other hand shows that incremental operational cost (I.O.C) moved in tandem with cost margin movement between 2008 and 2011. However in 2012 there was an inverse relationship (i.e. as incremental operational cost soared, operational cost margins dipped). We also see from figure 1b that, incremental impairment expenses (I.I.E) shows greater proportional changes, particularly in 2008 and 2012.

Table 2. Operating costs analysis-access bank (amounts expressed in thousands of Ghana cedis)

	2012	2011	2010	2009	2008
OP. INCOME (GH¢)	125,947	24,963	22,094	6,382	
Total OP.					
COST (GH¢)	79,520	11,995	10,092	5,747	0
PBT (GH¢)	46,427	12,968	12,002	635	0
PBT MRG (%)	36.86	51.95	54.32	9.95	0
COST-INC RATIO (%)	63.14	48.05	45.68	90.05	0
Cost Components					
Total OP.					
COST (GH¢)	79,520	11,995	10,092	5,747	N/A
Op. Exp (GH¢)	57,956	11,166	9,430	5,205	N/A
Impairment (GH¢)	21,564	829	662	542	N/A
Incr. Op. Cost (GH¢)	67,525	1,903	4,345	-	N/A
Incr. OP. Exp (GH¢)	46,790	1,736	4,225	-	N/A
Incr. Impair. Cost (GH¢)	20,735	167	120	-	N/A
Op. Exp (%)	72.88	93.09	93.44	90.57	N/A
Impairment (%)	27.12	6.91	6.56	9.43	N/A
Incr. Op. Cost (%)	562.94	18.86	75.60	-	N/A
Incr. Op. Exp (%)	419.04	18.41	81.17	-	N/A
Incr. Impair. Exp (%)	2501.21	25.23	22.14	-	N/A

Source: Bank's annual financial statements and researchers' calculations.

Table 2 is a replica of Table 1 for Access bank. The bank was licensed in 2007 and started operation in the course of 2008. The researchers however could not have access to the bank's financial performance for the year 2008.

4.3 Pre-Acquisition Cost Performance (Access Bank)

The results indicate Access Bank recorded the highest cost-income ratio of 90.05% in 2009, significantly driven by operating expense (90.57%). This appears to have been partly due to the fact that the bank was quite new and had absorbed substantial operating costs (typical of all virgin operations). The bank however substantially improved upon its cost performance the following year, bringing the ratio down to 45.68%. The bank managed to keep the ratio within the 40th percentile (48.05%) in 2011, the year of acquisition. On the average the bank's cost income ratio in the pre-acquisition period was 61.41%.

4.4 Post-Acquisition Cost Performance (Access Bank)

In 2012, the first post-acquisition year of operation, Access Bank incurred a 562.94% increase in operational cost, mainly driven by impairment cost. Profit before tax also increased significantly (by 404.53%). The cost-income ratio after acquisition therefore rose to 63.14%, slightly higher than the pre-acquisition average. The graphs depict profit and cost margins (Figure 4.2a) and incremental costs (Figure 4.2b) for Access Bank over the five year term.

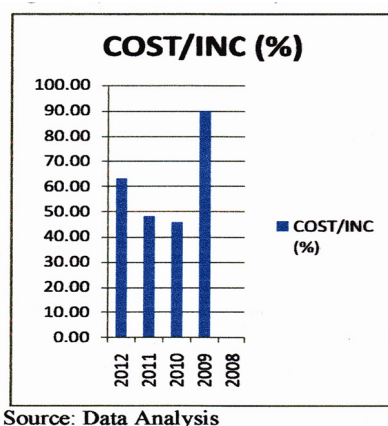


Figure 2a. Analysis

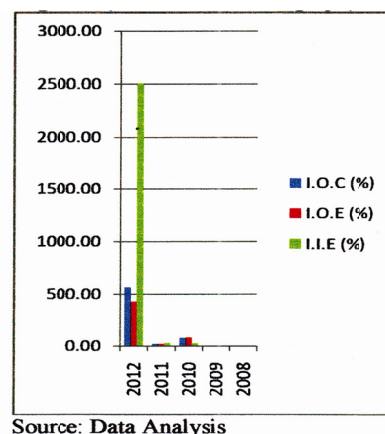


Figure 2b. Analysis

Figure 2a shows that in the pre-acquisition period, cost margin decreased sharply between 2009 and 2010 and then increased between 2010 and 2011 (akin to that of Ecobank). In contrast to Ecobank however, cost margin for Access Bank increased between 2011 and 2012 (post-acquisition). Fig 4.2b on the other hand shows that as incremental costs dipped between 2010 and 2011, cost margins increased during the same pre-acquisition period. In the post-acquisition year (2012), incremental cost was positively correlated to cost margin. This contrasting post-acquisition behavior of the two costs (%cost income ratio and incremental costs) for the two banks appears to come from the differences in the proportionate cost addition as a result of the M&A exercises. Ecobank and Access Bank respectively absorbed additional 83.29% and 562.94% operational costs during acquisition.

4.5 Overall Cost Efficiency Assessment

From the cost efficiency analysis it can be inferred that Ecobank showed an almost equal Operational Cost-Income ratio for post-acquisition (54.63%) and pre acquisition (54.74%). Access Bank on the other hand showed a relatively higher post-acquisition cost income ratio (63.14%) than in the pre-acquisition years (61.41%). A cursory look at these figures could lead to the conclusion that M&A had no effect on cost efficiency at Ecobank whereas with Access Bank M&A had a worsening effect on cost efficiency. The pre-acquisition ratio is however an average for four years (2008 to 2011).

5. Summary of Research Finding

5.1 Cost Efficiency Implications of M&A

The financial analysis conducted revealed that Ecobank showed an almost equal Operational Cost-Income ratio (proxy for estimating cost efficiency) for post-acquisition (54.63%) and pre acquisition (54.74%). Based on this research finding the operational cost efficiency before and after acquisition is not different for Ecobank. It should however be noted that the pre-acquisition cost ratio is an average for four operational years whereas the post-acquisition figure is an estimate for only one year. Hence the findings could alter if more years

post-acquisition are studied. Access Bank on the other hand showed a relatively higher post-acquisition cost income ratio (63.14%) than in the pre-acquisition years (61.41%). Just like in the case of Ecobank the pre-acquisition figure is an estimated average of the operational years whereas the post-acquisition figure is for one year. The research finding could change with more post-acquisition years under study.

The research also revealed other interesting findings under the financial analysis. Firstly, although impairment costs (financial asset impairment) generally formed a lower proportion (about 10% or lower) of total operation costs for Ecobank and Access Bank they tend to increase sharply in times of increasing costs (example in 2008 and 2011 acquisition) which cause a surge in cost-income ratios. Secondly although costs could increase in absolute terms, proportionally it could decrease with respect to profits as seen with Ecobank in the post-acquisition year. The results suggest that there is an economic rationale for future mergers in the banking industry.

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