Performance Evaluation Using Balance Scorecard: Comparison of Bbgl and Ebg in Ghana Banking Industry

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Abstract: The purpose of this study is to contribute to the understanding of how BSC is developed and used in evaluating the performance of banks in several dimensions. Using the concepts of Kaplan and Norton, and the data made available from the banks that were studied, a BSC was derived to measure the performance of the banks from 2010-2012. The analysis assisted the cause-effect relationships between the non-financial and the financial dimensions of the BSC. Both banks showed high performances in their financial perspectives as compared to the other individual perspectives of customers, internal business process, and learning and growth which is an indication of their reliance on that perspective. The paper proposed some future research in this area and other sectors of the Ghanaian economy. The BSC developed and used in the study is limited to the banks studied. However, the approach could trigger off reflections among policy makers such as the Bank of Ghana, other banks in the industry as well as companies in other sectors to start using the BSC.

Keywords: Performance measurement system, Balance scorecard, banking industry, Ghana

I. Introduction

In the business world the only thing that really matters is organization's performance. The introduction of performance management of banks is of crucial significance owing to the growing investment in the financial sector (Panicker and Seshadri, 2013). Performance measurement has been a topic of increased interest over the last few decades, and has seen continuous development and modifications by both academicians and practitioners. The interest in this topic is as a result of the growing criticism of financial measures use in the performance management systems therefore researchers have been trying to reach an efficient and effective approaches to measure performance (Kalaf, 2012). Literature indicates that performance measurement is mostly designed around financial measures and targets in operational and management control systems (Panicker and Seshadri, 2013). Namazi&Abhari (2010) states that prior to 1980's, organizations adopted financial measures (Net profit, return on equity, ROI, etc.) to appraise their performance. Nevertheless, it is well recognised that financial measures are mostly effective in the short term only (Panicker and Seshadri, 2013). Thus, where the performance management disregarded non-financial measures, the result was that the conclusion did not fully reveal the overall operations of the Organizations. Financial indicators alone can only disclose the performance of the organizations in the past and do not reveal the future state of affairs of a business’ operations. Financial measures of performance have been criticized by many authors for being short term oriented, considering past performance, not being consistent with current business environment, concentrating on tangible assets, lacking predictive power, reinforcing functional silos, and being inappropriate for all levels in the organizations (Singh & Kumar, 2007).

Performance management and evaluation methods and tools such as the Balance Scorecard (BSC) and Six Sigma have been significantly applied to improve business competitiveness as well as the efficiency and effectiveness of both profit and non-profit making organisations in today's global environment (Chen, Yang and Shiau, 2006). Addo (2010) believes that banks in Ghana mostly use financial figures and indexes to evaluate their performances and to provide information to users such as investors and other stakeholders to make informed decision and proposed the inclusion of non-financial factors. Much attention has not been paid to non-financial factors such as customers, internal process and learning and growth when it comes to assessing performance. The reliance on financial measures only to evaluate the strategic performance of the organization motivated Kaplan and Norton (1992) to suggest the Balanced Scorecard as a means to connect performance measures by looking at the business's strategic vision from four diverse perspectives: Financial, Customer, Internal Processes, and Learning and Growth. The Balance Scorecard (BSC) is proposed to showcase a strategic reason in terms of cause and effect associations among the existing activities of an organization and its long-term success (Chang, 2007; Henri, 2004 and 2006). The aim of this study is to evaluate the performance of banks in Ghana using Balance scorecard. This is to provide a complete approach for assessing banks performance using both financial and non-financial measures. This has become necessary because existing sources of reference on the performance of banks have conventionally been their End of Year Financial Statements as published in the dailies and the Ghana Banking Survey report.

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In addition, banks are required to issue various reports by Bank of Ghana on daily, weekly, monthly, quarterly and yearly basis, but all these reports attempt to measure the competitiveness and regulatory compliance of banks. All these attempts to measure performance and competitiveness of banks do not take into account the effect of non-financial perspectives and therefore creates a huge gap, which this study seeks to fill by providing information on performance of banks in Ghana in four perspectives using the Balance Scorecard (BSC). The rest of the study is arranged as follows; section two presents the literature review and section three details the methodology used in the study. The BSC framework developed and used in the study, the findings and discussions of the study are found in section four. Section five presents the conclusion and further research.

II. Literature Review

2.1 Performance measurement systems (PMS)

According to Forza and Salvador (2000), a performance measurement system is an information system that supports managers in the performance management process mainly fulfilling two primary functions: the first one consists in enabling and structuring communication between all the organizational units (individuals, teams, processes, functions, etc.) involved in the process of target setting. The second one is that of collecting, processing and delivering information on the performance of people, activities, processes, products, business units, etc. The basis of the definitions is one or a combination of the following: features of the performance measurement system (properties or elements which make up the performance measurement system), role(s) that the performance measurement system plays (purposes or functions that are performed by the performance measurement system) and/or processes that are part of the performance measurement system (series of actions that combine to constitute the performance measurement system). Each of the cited authors defines performance measurement system from a different perspective, using different types of characteristics to derive their definition. Neely et al. (1995) and Bititci et al. (1997) definitions of performance measurement system is from an operations perspective and the features of the performance measurement system. Bourne et al. (2003) definition is based on the role played by performance measurement system to management. Forza and Salvador (2000), definition is based on the role and processes that are part of the performance measurement system.

According to Neely (1998), a performance measurement system enables informed decisions to be made and actions to be taken because it quantifies the efficiency and effectiveness of past actions through the acquisition, collation, sorting, analysis, interpretation, and dissemination of appropriate data. Organizations measure their performance in order to check their position (as a means to establish position, compare position or benchmarking, monitor progress), communicate their position (as a means to communicate performance internally and with the regulator), confirm priorities (as a means to manage performance, cost and control, focus investment and actions), and compel progress (as a means of motivation and rewards).

2.2 Financial and Non-financial measures

Banker et al. (2000) investigated the relationship between non-financial measures and financial performance and the performance impacts of incorporating non-financial measures in incentives contracts. To answer their research questions, they analyzed time-series data for 72 months from 18 hotels managed by a hospitality firm in the United States of America. In their study, Banker et al. (2000) used consumer satisfaction as the non-financial performance measure, while employing operating profit and its various components to proxy financial performance measures. Their result suggests that at the research site, non-financial measures of customer satisfaction help predict future financial performance. Additionally, the association between financial and non-financial performance may be a result of repeat purchase as opposed to increase price premiums charged to customers. This finding is consistent with the evidence obtained by Ittner and Larcker (1998b) who found customer satisfaction measures to be leading indicators of consumer growth. Nevertheless, Banker et al. (2000) did not find evidence that supported the assertion that increased customer satisfaction is associated with increased operating costs, although it is possible that expenditures on capital investments may have increased to support a customer satisfaction strategy.

On the issue of the performance impact of incorporating non-financial measures in incentives contracts, Banker et al. (2000) discovered that the change to incentive plans had a significant positive effect on revenues after controlling for inflation and competitors’ performance. Based on this result, Banker et al. (2000) concluded that both non-financial and financial performance improved following the implementation of an incentive plan that included non-financial performance measures. A study by Said, HassabElNaby and Wier (2003) investigated the performance consequences of the implementation of non-financial performance measures. Using panel data (derived from Lexis/Nexis database), covering the period 1993-1998, they compared the performance of a sample of firms that used both financial and non-financial measures (1,441 firm-year observations) to a matched sample of firms that based their performance measurement solely on financial measures (1,441 firm-year observations). The intention of Said et al. (2003) was to examine the implications of non-financial performance measures included in compensation contracts on current and future performance. Their empirical evidence
suggests that non-financial measures are significantly associated with future accounting-based and market-based returns, and with contemporaneous data, the same result held for market-based return but not accounting-based returns. These results are consistent with previous studies that show non-financial performance measures are associated with subsequent firm economic performance (Banker et al., 2000). Said et al. (2003) also found evidence that the use of non-financial measures is significantly associated with an innovation-orientated strategy, adoption of strategic quality initiatives, length of product development, industry regulation and the level of financial distress. This discovery supports the results provided by Ittner et al. (1997) who examined the factors that influence the choice of performance measures in annual bonus contracts. Furthermore, Said et al. (2003) found evidence that the relationship between the use of non-financial measures and future and current firm performance depends on the match between use of non-financial measures and the firm’s characteristics.

In line with previous studies that investigated non-financial performance measures (Ittner et al., 1997; Banker et al., 2000; Said et al., 2003), HassabElnaby, Said and Wier (2005) empirically examined firms’ decisions to retain the use of non-financial performance measures as part of the compensation contracts following the initial implementation. Based on the sample of 91 firms examined in Said et al. (2003) that used non-financial performance measures during the period 1993-1998, HassabElnaby et al. (2005) found that firms performed significantly better when they retained their non-financial measures. The evidence shows the importance of performance as a motivation to retain the non-financial measures in compensation contracts. HassabElnaby et al. (2005) also found evidence consistent with prior research (Ittner et al., 1997; Said et al., 2003) that indicates the significance of considering the match between firm characteristics and the use of non-financial measures. Moreover, HassabElnaby et al. (2005) found that prior performance is time variant with respect to the decision to retain non-financial performance measures while firm characteristics are time invariant.

The discussion above illustrates that there is a growing body of literature devoted to potential benefits of non-financial performance measures. However, Ittner and Larcker (2003) found that only a few companies realize these benefits. They found that most companies fail to identify, analyse, and act on the right non-financial measures, where little attempt is made to identify areas of non-financial performance that might advance their chosen strategy. Additionally, these companies have not demonstrated a cause-and-effect link between improvement in those non-financial areas and the financial areas. As Otley (2001) identified, some of the innovations include activity-based costing (ABC); activity-based budgeting (ABB); activity-based cost management (ABCM); activity-based management (ABM) and economic value added (EVA).

The ABC was devised by Kaplan in 1983 (Innes and Mitchell, 1998) as a ‘more accurate method of product costing’. It was considered a technical improvement to traditional accounting techniques; however, its major contribution was that it provided a platform for other measures to build from (Otley, 2001). Otley goes on to add that the advantages of implementing the ABC were due to its ability to develop better methods of overhead cost management and business practice improvement, rather than being able to provide a better knowledge of product costs. This can be seen with the development of the ABCM and ABM which were derived from the ABC. The EVA approach is another recently popular approach (mid-1990s). It was developed by the Stern Stewart Corporation as an overall measure of financial performance, focusing on assisting the manager to deliver shareholder value. It does this by avoiding some of the performance measurement problems recently experienced with other financial performance measures (Otley, 1999). Of all the proposed managerial control and performance measurement systems, however, it is the BSC which has proved to be the most significant development in management accounting, resulting in its world-wide adoption (Malina and Selto, 2001).

2.3 Balance scorecard (BSC)

The Balanced Scorecard has emerged in recent years as what can perhaps best be described as a strategic control tool. Its high-profile in management seminars and academic debates has placed the Balanced Scorecard alongside approaches such as Activity Based Costing/Management and Total Quality Management in terms of industry and literary attention. The propaganda surrounding the Balanced Scorecard provides evidence that it is the key for driving performance in organizations; that it transforms strategic management paradigms by placing the emphasis on the enablers instead of on the results; and that it is the cockpit which provides all relevant strategic information. According to Kaplan and Norton (1996), ‘The Balanced Scorecard provides managers with the instrumentation they need to navigate to future competitive success’. They claim that it ‘…addresses a serious deficiency in traditional management systems: their inability to link a company’s long-term strategy with its short-term actions’ (Mooraj et al. 1999). The Balance Scorecard’s aim is to present management with a concise summary of the key success factors of a business, and to facilitate the alignment of business operations with the overall strategy (Mooraj et al. 1999). The characteristic of comprehensiveness in the BSC involves the provision of performance measures in four perspectives, namely the financial, the customer, the internal business process, and the learning and growth perspectives. Learning and growth measures indicate a company’s success in developing the personnel and systems necessary for growth and product improvement in the long run. Internal business process measures indicate the level of a company’s
performance with respect to activities that are critical to meet customer and financial objectives. Customer-related measures indicate a company’s success in attracting and retaining its targeted customers. Financial measures indicate how well a company is performing with respect to its profitability targets. The central idea behind the four perspectives of the BSC was to complement traditional financial performance measures with non-financial performance measures (Decoene and Bruggeman 2006).

![Figure 1: The Balanced Scorecard Framework (Kaplan and Norton 1996)](image)

III. Methodology

3.1 Research method

There are several research methods that can be used in any given research work. The method chosen depends on the nature of research to be conducted. The two major research methodologies are quantitative methods and qualitative methods. Furthermore, there are statistical analysis, action research, and personal reflection. This study relied exclusively on quantitative data to answer the various research questions. This is because the study relied on published financial statements of the companies studied. The focus of this study is on contemporary phenomenon with some real life context and includes using the balance scorecard to measure or evaluate performance in four perspectives of financial, customer, internal business process and learning & growth, so the case study method is the preferred choice. The case study as an alternate form of research strategy is suitable for investigation of contextually rich events or phenomena, especially those which: may be queried using how or why questions; or where the researcher can exercise little control; and which focus on contemporary, rather than historic information (Yin, 1984). Furthermore this is a relatively new research area in a developing country context and existing theory seem inadequate so the case study approach is most suited. Case study designs can either be single-case design or multiple-case design and numerous levels of analysis (Yin, 1984). This study used multiple-case study design. Through using multiple-case study designs it is possible to replicate the case and thus, make use of the research evidence gained from cross-analysis of all the multiple cases. However, despite their often-proposed more compelling evidence, multiple case studies can be difficult to conduct (Yin 2003)

3.2 Case selection

Case studies may either focus on a single case or use a number of cases; a single case may form the basis of research on typical, critical or deviant cases, while multiple cases may be used to achieve replication of a single type of incident in different settings, or to compare and contrast different cases. Multiple-subject case studies are especially useful if topics are too complex. (Yin, 1984; Schell, 1992). There are benefits of carrying out more than one case study as more external validity of findings and choice of companies with different levels of BSC implementation. Moreover, regarding BSC implementation it is difficult to identify the criteria for choosing unique case study. The selected companies used as case study are important players in the banking industry in Ghana and have branches in all ten regions of Ghana. They are large companies according to the criterion of market share and number of employees. Furthermore, the choice of BBGL and EBG was also influenced by the accessibility of information to the researcher as well as on the basis of their net income- a procedure consistent with prior studies (Libby and Waterhouse 1996).
3.3 Data collection

Case studies typically combine data collection methods such as archives, interviews, questionnaires and observations. The evidence may be qualitative or quantitative or both. Yin (1984) describes cases with a single source of information as holistic cases, cases with multiple sources of information as embedded cases. This study relied exclusively on quantitative data from secondary sources to answer the various research questions. The archival strategy was used, thus research was based on administrative records and documents of the studied banks. These documents can simply be summed up as the past financial statement of both banks. The relevant data was available from the bank websites, and was studied for four years (2010-2012). Data was collected directly from the bank’s financial statements, monthly, quarterly, annual reports, sustainability report, complaint analysis reports as well as from annual banking survey reports conducted by PriceWaterhouseCoopers reports for last four years (2010-2012). Employing the concept of the strategic map, the researcher worked with the bank’s administrators to develop a cause-effect relationship to link the bank’s objectives to its strategic goals in an effort to select the measures pertaining to each of the four BSC perspectives. A performance scale was identified for each measure, and 50 score points were divided on the elements of each scale. The total scores in the BSC developed were therefore 1000 (20 measures x 50 points, or 250 points/perspective). Scores were assigned to each measure based on the performance achieved in each of the period studied from 2010-2012.

IV. BSC Development, Findings and discussion

4.1 BSC Development for selected banks

The below steps were used to develop BSC for the selected companies:

**Step 1:** Using the concept of the strategic map, the researcher worked with the bank's administrators to develop a cause-effect relationship to link the bank's objectives to its strategic goals in an effort to select the measures pertaining to each of the four BSC perspectives. Five measures for each perspective for both banks were chosen as follows:

**Cases: BBGL and EBG**

- **Financial perspective:** EPS, ROE, ROA, Net Profit Margin and Capital Adequacy Ratio.
- **Internal business Processes Perspective:** Growth of Banking Services, Growth of Credit, Share of Industry Advances, Growth in Software Applications, and Time Savings in Loan Processing.
- **Learning and Growth:** Employee Turnover Rate, Growth of the Bank's Branches, Percentage of Employees Appraised, Percentage of Employees receiving Training and Training Hours per Employee.

**Step 2:** Using the data available about the selected companies’ performances from 2010-2012, the BSC’s objectives, measures, and targets for the four perspectives were identified and are shown in Table 1.

**Step 3:** A performance scale was identified for each measure, and 50 score points were divided on the elements of each scale. The total scores in the BSC developed are therefore 1000 (20 measures x 50 points, or 250 points/perspective). Tables (2 and 3) present the measures, the scales and the scores breakdown for each measure within perspectives.

**Step 4:** The companies’ performance is measured for the three years of study according to the scales and scores developed in step 3. The last four columns of Tables (2 and 3) present the scores assigned to each measure from 2010-2012. Tables (2 and 3) also show the perspective subtotal/year, while the last row of the table presents the total score/year for all the perspective.

4.2 Findings: Comparison of BBGL and EBG

Figure 4.1 below demonstrates that the overall performance of EBG in all four perspective was better than BBGL for the three-year period studied scoring 810, 710, and 630 out of a total scale point of 1000 for 2012, 2011 and 2010 respectively as compared to 710, 640 and 610 for BBGL for the same periods. Converting them into percentages give 81%, 71% and 63% and 71%, 64% and 61% for EBG and BBGL respectively.
4.2.1 Comparison of BSC four perspectives

The performance of BBGL was a little higher than EBG in the financial perspective as demonstrated by the below figure 4.1. This finding coincides with the bank’s concentration on the financial performance as a measure of performance. Converting these scores on percentage scales for the 3 year period studied gives 84%, 72% and 68% for BBGL while EBG’s yields 80%, 72% and 64%. However, EPS in this perspective showed an interesting trend as EBG scored higher points on the scale points from 2011-2012 than BBGL (Table 2 and 3).

Other perspectives: Internal business process, Customer, Learning and growth

The scores or results show that EBG performed well in all the other three perspectives of internal business process, Customer, and Learning and Growth than BBGL as depicted by Figure 4.2, Figure 4.3 and Figure 4.4 below respectively. It is evident from the study that EBG puts much emphasis on its internal business process having scored good points there. Overall, the performance of EBG was better than BBGL using the Balance scorecard.
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Figure 4.2 Internal business process results between BBGL and EBG (Author, 2014)

Figure 4.3 Customer perspective results between BBGL and EBG (Author, 2014)

Figure 4.4 Learning and growth results between BBGL and EBG (Author, 2014)
4.3 Discussions and Implication

This research work may be viewed as part of a diverse investigation of the usage of many performance evaluation approaches developed in the past few decades. It can, also, provide guidelines to organizations when they consider methods of performance evaluation particularly the banks that were used as case study. The objective of this study was to increase our understanding on how the BSC approach may be developed and applied to measure the performance of banks in the banking industry in Ghana. This study has constructed a BSC model (including 20 measures) that was used to measure the performance of BBGL and EBG. Despite the fact that the results of the performance of the two banks measured by BSC looked not too strong especially in the three perspectives of customer, internal business process and learning and growth, the banks is not to blame for that for some reasons. Firstly, the banking sector in Ghana is very saturated and competitive with new entrants eroding part of the gains previously chopped by these traditional banks as well as market share. Secondly, although both banks are aware of the BSC’s existence as a performance tool, they have not yet fully utilised it as in the case of financial measures. This study has highlighted the importance of viewing performance from other perspectives in addition to the financial perspective. It has also provided additional information to shareholders as well as existing and potential investors to assess both the short and long term future of the banks. The banks administration has realized the importance of this tool as a strategic and valuable performance management system, and has expressed their interest and willingness to learn this approach and to apply it in the future. The successful application of the BSC does not come from a vacuum; rather top management of the bank should demonstrate its commitment to the adoption of the BSC. With these findings, the researcher expects that with the increased demands from stakeholders, financial sector analysts, educators, existing and potential investors, and practitioners the BSC shall be widely used in the banking industry in Ghana shortly. The results of this work have many implications on the authorities of the Central Bank of Ghana and policy makers in the financial sector in terms of the diffusion of the BSC as a systematic approach to performance evaluation. From the results of the study, the following recommendations are made:

Banks should implement the Balance scorecard as a performance measurement and strategy implementation too to improve their operational performance and profitability. Also, PwC in carrying out the annual banking survey on the performance of banks in Ghana should include other non-financial perspectives as elaborated in this study so that the investors, academics and the general public are better informed on the holistic performance of banks in Ghana. This will be a sort of facts behind the figures presentation that will increase the level of competition among banks in Ghana. There is the need to place emphasis on the fact that, when implementing this framework, banks must follow a well-planned methodology in order for them to reap the full benefit of their investment.

V. Conclusion and further research

5.1 Conclusion

The analysis and findings of the studied banks showed that BBGL scored low points on the non-financial perspectives especially on its customer perspective. This indicates that it places more emphasis on financial measures than the non-financial measures. EBG on the other hand, showed significant performance in the non-financial perspectives specifically in its internal business process and customer perspectives by scoring more points. This means that EBG places emphasis on financial and non-financial measures. The study also revealed that the BSC framework indeed provides additional information when used to assess the performance of banks in Ghana. From the findings it can be inferred that using the balanced scorecard to assess performance of banks in Ghana will give a more holistic view than using just the financials. It is clear that the well performing banks financially may not necessarily be the best banks in the industry when other perspectives or dimensions are taking into consideration. The sustainability of such performance may largely be dependent on certain practices that are not geared towards customer satisfaction and efficient business processes or practices in order to create superior returns and long term growth based on customer satisfaction and lower transaction cost. In summary, the balanced scorecard framework can be implemented to assess performance of banks in Ghana. The BSC framework can also assist by providing additional information using measures in several dimensions such as customer perspective, internal business processes perspective and learning and growth perspective to managers, shareholders and other interested stakeholders regarding the performance of the banks in Ghana. This will enable banks focus on the core strategies in order to create and deliver superior value and returns to their stakeholders. This puts the shareholders in an informed position regarding the value the banks are delivering to them in the short-run versus the long-run. This additional information the BSC framework is providing could be viewed like a commentary on “facts behind the figures” to reveal the non-financial inputs that went into achieving the financial results and whether the results being reported by the banks are sustainable in the long run. This information can be very useful to both shareholders and management of the banks which can help them fine tune the execution of their strategies.
5.2 Limitation and further research

Due to time constraint, just a few of the metrics were selected for each of the four main perspectives to demonstrate the power of the balanced scorecard. In the event of a more corroborative research work between the academia and industry, the number of metrics under each perspective could be increased. The return on investment on the implementation of the balanced scorecard could also be investigated and a more detailed analysis using complex statistical models to determine the extent to which non-financial perspectives affect financial performances of organizations or institutions with a much bigger sample size. Future researches in the banking sector in Ghana are needed in this domain, and should focus on studying the contingent factors that facilitate or impede the implementation of the BSC such as: organizational culture, organizational structure, private vs. public organizations, environment, and technology. More studies are, also, needed to identify the relevant measures of the BSC for the banking industry. A further research work could also be done in other industries such as manufacturing, merchandise retailing and profit and non-profit institutions to help drive the implementation and measurement of their strategies.

Reference