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# Balanced Scorecard and Financial Performance of Qouted Consumer Goods Companies in Nigeria

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***Abstract:*** Non-financial measures gained relevance in the past few decades in the assessment of organizational performance metrics comparing past data and how to better future decisions by identification and improvement of internal operations to help achievement of external outcomes. Evaluating the components of Balanced Scorecard (BSC) effect on financial performance of quoted consumer goods companies in Nigeria was the focus of the research. Content analysis was adapted to mine data from published annual reports for various years relevant to the variable of the study. Data collected were analysis using descriptive and inferential statistics. Results revealed Balance Scorecard perspectives were all statistically significant and positive ($R^2$=o-7279, Adj. $R^2$= O-71343, F= Ratio = 24.172, p-values <0.05) impacting financial performances of quoted consumer goods companies in Nigeria within the period of the investigation. It was concluded that non-financial measures are potent influencers of financial performance and recommended that regular review of all the perspectives be a part of strategic and tactical polices of companies given the dynamic business environment in which they operate to ensure operational sustainability.

***Keywords****:* Balanced Scorecard, financial performances, Dynamic Business environment.

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## 1. INTRODUCTION

It has been well acknowledged that non-financial measures are critical to the success of organizations, as they affect future performance and the ability of an entity to continue into the foreseeable future (Lasisi *et al.*, 2014). Yet, the over reliance on, and the extensive application of financial performance measures in business operations continues to surge despite the inability of financial indicators to detect corporate collapse of giant firms in the past (Hellal and Tagraret, 2023). The growing demand for more integration of non-financial information and their implications on firm's performance as advocated by scholars (Alhassan *et al.*, 2018), is perhaps yet another reminder that traditional financial performance measures may not be sufficient in accomplishing the strategic goals of organizations in a very agile and competitive business world (Bouchetara *et al.*, 2021). This has exacerbated the shortcomings of a narrow-focused financial performance measurement system and strengthened the call to embrace contemporary management accounting techniques such as the Balanced Scorecard (Ofurum *et al.*, 2019).

Since their emergence in the early 1990s, organizations have embraced the balanced scorecard (BSC) developed by Kaplan and Norton (1992) as one of the widely acclaimed performance management frameworks (Thuong *et al.,* 2023). Despite the popularity of BSC, empirical evidence suggests that the debate on its ability to create and add value to firms hangs in the balance (Emmanuel *et al.*, 2017). For example, the proclaimed benefits to organizations applying the BSC as a performance management system have been contested. Extant literature hints that the uptake of traditional financial performance measures is still higher than that of innovative management accounting techniques like the BSC especially in developing countries (Osewe, 2019). While there have been some improvements in the adoption rate of innovative management accounting techniques in developing countries, studies show that BSC usage in developing countries is still emerging. Arguably, it could be that the adoption of BSC may not have yielded benefits as anticipated, which may explain its slow adoption speed (Bouchetara *et al.*, 2021; Thuong *et al.,* 2023). As a result, highlighting the importance of further incremental insights into BSC application, and the driver for its speedy adoption becomes necessary. A performance measurement tool that has gained popularity in practice and literature is balanced scorecard.

With rapid innovations in the financial markets, all firms are currently facing fierce competition from rivals. The traditional performance management tools appear to measure an all-round performance to meet the organisational needs of strategic development. This is because such tools ignore the non-financial factors, thus it cannot fully reflect an overall operation of the organisation. Such financial data are said to possess very limited predictive ability and considered to be inadequate to assist organisations to perform effectively and efficiently as well as equip them to respond to customer and environmental complexities in the ever-changing world economy (Kaplan and Norton, 1992). There is thus an urgent need to measure the efficiency of the balance scorecard to know how credible it is for adoption by firms and know its suitability in Nigeria.

The aim of this study was to assess the influence of the balanced scorecard on financial performance of consumer goods manufacturing companies in Nigeria. The specific objectives were:

(i) to ascertain the effect of learning and growth perspective on return on assets (ROA) of consumer goods companies in Nigeria.

(ii) to determine the effect of customer perspective on return on assets (ROA) of consumer goods companies in Nigeria. iii. to evaluate the business process perspective on return on assets (ROA) of consumer goods companies in Nigeria.

The following research questions were raised in accordance with the objectives of the study:

(i) What is the influence of learning and growth perspective (LGP) on return on assets (ROA) of consumer goods companies in Nigeria?

(ii) How does customer perspective (CP) influence return on assets (ROA) of consumer goods companies in Nigeria?

(iii) What is the influence of business process perspective (BPP) on return on assets (ROA) of consumer goods companies in Nigeria?

The hypotheses were formulated in line with the objectives of the study in null forms:

**$Ho_1$:** Learning and growth perspective (LGP) does not significantly influence return on assets (ROA) of consumer goods companies in Nigeria.

**$Ho_2$:** Customer perspective (CP) does not significantly influence return on assets (ROA) of consumer goods companies in Nigeria.

**$Ho_3$:** business process perspective (BPP) does not significantly influence return on assets (ROA) of consumer goods companies in Nigeria.

# 2. REVIEW OF RELATED LITERATURE

## 2.1. Conceptual Literature

### *2.1.1 Balanced Scorecard*

Balanced scorecard offers a set of balanced measurements for the management of the performance and the linkage of these measurements towards the strategic initiative for improved performance. There were some studies done in regard to the effects of the usage of balanced scorecard on the improved performance. There is an increasing trend of implementation of the balance scorecard strategy as a tool to measure the business performance (Braam and Nijssen, 2011). It is estimated that around 44 percent of businesses in USA use balance scorecard. In general, it is perceived that balanced scorecard is mostly used in developed economies where there is high competition. Balanced scorecard can be described as a performance management tool that eases the translation of the vision and the strategy of a company towards a tangible set of measurements (Costantini *et al.*, 2020). In other word, Balanced Scorecard (BSC) is a performance measurement conceptualization that translates an organization's strategy into clear objectives, measures, targets, and initiatives organized in the four perspectives: financial, customer, business processes, and human resources or innovation and learning (Mahmoud, 2014).

Each area perspective represents a different aspect of the business organization in order to operate at optimal capacity. Hou (2015) asserted that BSC is a way of measuring organizational, business unit or departmental success; balancing long-term and short-term actions; balancing the following different measures of success; Financial; Customer; Internal Operations; Human Resource Systems & Development (learning and growth); tying the firm's strategy to measures of action. Much of the success of the scorecard depends on how the measures are agreed, the way they are implemented and how they are acted upon (Lonbani *et al.*, 2016). The BSC therefore takes the specific approach structure and components of a performance measurement system hence assurance of more profits to the firm's activities due to its business efficiency occasioned by the four important balanced perspectives (Quesado *et al.*, 2016). For the balanced scorecard to work, organizations should articulate goals for time, quality, and performance and service while remaining sensitive to the cost of their products in order to build customer confidence and loyalty.

### *2.1.2. Perspectives of Balanced Scorecard*

***(i) Customer perspective:*** This perspective captures the ability of the organization to provide quality goods and services, the effectiveness of their delivery, and overall customer service and satisfaction.

This will result from price, quality, availability, selection, functionality, service, partnerships and brand value propositions, which will lead to increased customer acquisition and retention (Gekonge, 2005). The BSC demands that managers translate their general mission statement on customer service into specific measures that reflect the factors that really matter to customers (Kaplan & Norton, 1992). Customers' concerns tend to fall into four categories: time, quality, performance and service, and cost. Satisfied customers buy a product again, talk favorably to others about the product, pay less attention to competing brands and advertising, and buy other products from the company (Al- Matarneh, 2011). Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business.

This perspective takes into account the capacity of a business to secure qualitative goods and services for its clients, effectiveness of offering those services, and addresses the concerns of customers in order to develop ongoing support (Mamabolo and Kerrin, 2020). The focus here is towards the customers and how to give them value. This is because when a business loses, the drive to track and retain customers losses the credibility. And, as such no business can flourish without a customer bases which is strong. According to Rherib *et al.* (2021), customer perspective captures the ability of the organisation to provide quality goods and services for their customers. It also looks at effectiveness of their service delivery, and the overall customer service and satisfaction. This perspective helps measure the level of customer satisfaction, customer retention and market share of the firm.

### Relevance of Improved Customer Satisfaction in Improving Firm Financial Performance

The CP is another part of the BSC. According to Quesado *et al.* (2016), a customer's perspective in the BSC reveals positive thoughts about their satisfaction, reinforces customer retention, and promotes customer acquisition. An enterprise's internal business perspective is relative to the internal decisions and processes that are focused on providing added value for customers. Customer satisfaction is a key consideration for businesses in this scenario;

thus, it is deemed a significant requirement. This concept is focused on the lifetime of products and targets an enterprise's ability to deliver high-quality services and products aligned to customer satisfaction. If an enterprise's customer satisfaction level is portrayed negatively, its income and profitability will not increase. Alternatively, an enterprise's income and profitability will increase as a result of heightened levels of customer satisfaction related to its products and services (Sharma and Sharma, 2020). From the CP, the BSC assists in the success of a business strategy by creating value and promoting benefits. Therefore, satisfying and creating value for customers will positively promote the financial performance of companies.

***(ii) Internal Processes Perspective:*** (Asiaei and Bontis, 2019), internal processes perspective focuses on the internal business results that lead to financial success and satisfied customers. To meet the organizational objectives and customers' expectations, organizations must identify the key business processes at which they must excel. These key business processes are monitored to ensure that outcomes will always be satisfactory. The internal processes perspective reports on the efficiency of internal processes and procedures. The premise behind this perceptive is that customer-based measures are important, but they must be translated into measures of what the organization must do internally to meet its customers' expectations (Kaplan and Norton, 1992). Hellal and Tagraret (2023), business processes perspective focuses on the internal business results that lead to financial success and satisfied customers. This consists of measures such as cost and quality related to the business processes.

## Relevance of the Internal Processes in Firm Financial Performance

The internal process is also part of the BSC. According to Benková *et al.* (2020), the positive outcomes resulting from adopting internal business processes, such as the BSC, include the functionality of business operations, reworks, and reductions in operational costs.

Several studies have defined it as widening the incorporation and coverage of the total internal business process. This suggests that a more comprehensive system of firm performance can contribute to the long-term success of an enterprise. According to Bouamama *et al.* (2021), the IP is based on internal business processes that lead to customer satisfaction by providing them with added value, which is a vital goal for every organisation, and also to the optimisation of a firm's financial performance. In addition, for the CP of the BSC, one must identify the main processes that the organisation must regularly consider as well as provide added value for the customer and, ultimately, the stakeholders. With this in mind, the BSC emphasises process evaluation and provides a significantly positive impact on strengthening customer relationships and meeting the enterprise's nominated financial goals. This BSC process facilitates the identification of key processes and guides the development of the most suitable measurements, enabling them to grow to meet the expectations of both customers and shareholders alike, thereby enhancing the enterprise's financial business position. An additional focus is required by enterprises on various issues, such as order processing, manufacturing, delivery, and product development (Costantini *et al.*, 2020). To satisfy customers' needs and wants, enterprises can identify and adopt new internal processes, as opposed to only making small improvements to their existing processes. Product development, manufacturing processes, operations, delivery, and after-sales activities must be considered. Thus, the IP plays a significant role in aligning both the FP and the CP to achieve and maintain a high-level financial performance for enterprises (Dudic *et al.*, 2020).

***(iii) Learning and Growth Perspective:*** According to Kaplan and Norton (1992), a company innovative ability, learning and growth perspective examine the ability of employees (skills, talents, knowledge and training), the quality of information systems (systems, databases and networks) and the effects of organizational alignment (culture, leadership, alignment and teamwork), in supporting the accomplishment of organizational objectives (Costantini *et al.*, 2020). The learning and growth perspective examines the ability of employees (skills, talents, knowledge and training), the quality of information systems (systems, databases and networks) and the effects of organizational alignment (culture, leadership, alignment and teamwork), in supporting the accomplishment of organizational objectives. This perspective includes identification of the infrastructure that a business needs to develop in order to create long term and sustainable growth and ongoing improvement. It requires that management continuously improve its organizational skills to meet environment challenges faced by the competition, and to give value for its customer (Dudic *et al.*, 2020) identified three sources of a business for learning and growth: people, informational system, and organizational processes.

Financial perspective, client, and internal business process often identify gaps in organizational structure, through existing skills and potential abilities to achieve improved performance. These gaps can be addressed from initiatives taken from management such as investments in the training of staff, and IT

(Costantini *et al.*, 2020). Businesses may take as much as their employees, therefore, there should be real efforts to retain employees should to shoulder with knowledge and information which the perspective of learning and growth attempts to determine. Kaplan and Norton (1992) showed that a company innovative ability, learning and growth perspective examines the ability of employees proxied by skills, talents, knowledge and training; the quality of information systems captured by systems, databases and networks; and the effects of organisational alignment proxied by culture, leadership, alignment and teamwork, in supporting the accomplishment of organisational objectives. (Bouamama *et al.*, 2021) argued that it consists of measures such as employee satisfaction, employee retention and knowledge management. The import of the foregoing is that the balanced scorecard involves a holistic model that links individual efforts and accomplishments to each business unit objectives.

## Role of the Learning and Growth Perspective (LGP) in Improving Firm Financial Performance

The LGP within firms is another part of the BSC. According to Benková *et al.* (2020), the benefits relative to the learning and growth outcomes of the BSC include research and development, employee morale, and employees' innovative contributions. Identifying the multifaceted concept of learning and growth is imperative to provide satisfaction that matches the ever demanding and changing requirements of an enterprise's performance. To gain a competitive advantage in the developing global economy, human resource managers and leaders have begun to use more modern methods that focus on human capital development and performance measurement rather than on traditional management methods that focus on reducing costs, increasing efficiency, and controlling employees (Asiaei and Bontis, 2019). The concept of learning and growth is recognised as a core factor in achieving the successful implementation of the BSC. It assists employees in learning new skills and information systems (Sharma and Sharma, 2020). Furthermore, learning and growth concepts target aspects such as motivation, training, and the capacity to develop specific employees required to implement the enterprise's new strategies. Enterprises that have strategized to achieve good results through the development of improved internal processes facilitate measurement identification and internal process innovations.

This would reveal gaps in the relationship between the current status of the process and the actual levels required to achieve the goals, in addition to fundamental factors such as worker skill levels and information systems. Once these factors are identified, the developed corrective measures can be implemented to remove gaps to ensure a sustainable future.

(Rherib *et al.* (2021), the concept of innovation and learning defines and provides measures for how enterprises can innovate their products and processes to increase their market share in the face of intense global competition. Indicators of learning and growth are linked to the creation of continual progress and improvement in a firm's goods, services, and processes (Mamabolo and Kerrin, 2020). Human resource measurements combine diverse factors, such as employee satisfaction, employee retention, employee training, staff skill levels, and organisational structure. Developing and implementing training sessions for employees and management teams will lead to the transition of the enterprise's strategies and visions into key performance indicators.

A study demonstrated that when employees are satisfied with their jobs, their productivity levels increase, resulting in a positive attitude toward customers, greater positive acceptance and use of internal procedures, and ultimately increased financial returns for enterprises (Quesado *et al*., 2016). Furthermore, the structured improvement of employees' qualifications is an essential factor in pleasing employees and promoting the growth of a business. It also supports employees in being more creative and focused on developing added value for the business. According to Kaplan and Norton (1992), an enterprise's innovative ability, the enhancement of its LG to assess its employees' abilities (skills, knowledge, and training), the quality of information systems (e.g., systems and networks), and the effects of organisational alignment (e.g., culture, leadership, and teamwork) will support the achievement of its objectives. These factors have a significant impact on an enterprise's financial performance.

***(iv) Financial Perspective:*** Lonbani *et al*. (2016) showed that financial measures convey the economic consequences for the actions taken by the firm. The focus is on the profitability related measures. These measures help stakeholders in the firm confirm the profitability of their investments. This perspective can provide viable and significant information that will assist management monitor the performance of the firm as well as improve motivation and communication and spot problems. Role of the Financial Perspective in Firm Performance The FP is one element of the BSC. According to Alhassan *et al*. (2018), when considering an enterprise's performance, the FP reveals a significant relationship with its strategy implementation through the use of the BSC, incorporating nonfinancial measures. These factors support the enhancement of the enterprise's performance through motivational factors. The FP includes return on investment, accounts payable and receivable, earnings per share, and operating expenses. Furthermore, the FP is of great assistance in materialising an enterprise's goals and objectives. According to Lonbani *et al*. (2016), the FP is defined as the measurement of how strategies, implementation, and execution will impact the firm's profitability, growth, and shareholder value. Therefore, the FP helps businesses to determine their profits and financial goals effectively.

The overall financial position considers profitability, revenue growth, increased sales, as well as revenue generated by each customer per visit (Hou, 2015). Therefore, the overall financial position can measure, monitor, and identify such financial aspects as business results, increases in sales, and reductions of expenditures for businesses. Evidently, the financial aspect reveals and emphasises an enterprise's cost efficiency. It supports the ability to provide good value to customers at minimal cost to the enterprise and develops sustainable value for stakeholders. Furthermore, Kaplan and Norton (1992) had noted that fiscal measures have traditionally focused only on profit-related measures (i.e., how shareholders traditionally assess the success of their investments), such as return on capital, return on equity, and return on sales.

### *2.1.3 Financial Performance*

Firm performance has become a significant concern for today's diverse business owners, managers, and accountants in many countries (Hendricks *et al*., 2011). A firm's performance indicates an organization's capacity and willingness to achieve the outcomes that it has previously established, as well as gauges the organization's performance in accomplishing its survival and growth goals. The major target of all enterprises should be aligned with their goals and objectives to achieve maximum profit. (Mahmoud (2014) noted that the concept of an organization overall performance is strongly aligned with its implementation strategy through its BSC assessment. Based on the theory of the BSC, enterprises that are active in the new era can adopt the BSC to achieve their overall performance. By acknowledging the need to complement financial indicators with nonfinancial goals, the statement recognizes the significance of a balanced approach to performance measurement. The BSC's inclusion of multiple perspectives, such as customer satisfaction, internal processes, and learning and growth, aligns with addressing these limitations According to Costantini *et al*. (2020), firm performance used to be measured through the traditional cost or management accounting process developed in the early 1900s. Prior to the introduction of the BSC, the main tool for assessing a firm's performance was financial metrics (Braam and Nijssen, 2011).

Financial metrics were primarily concerned with traditional performance management systems; as a result, they failed to recognize the strategic significance of performance management inside the firm and instead led to dysfunctional conflict behaviour (Emmanuel *et al*., 2017). Therefore, the BSC's value lies in its ability to integrate both financial and nonfinancial measures into performance evaluation. By incorporating nonfinancial perspectives such as customer satisfaction, internal processes, and learning and growth, Vietnamese enterprises can better understand their performance beyond just financial results. Previous accounting measures that only examined financial performance are now seen as unsuitable and irrelevant (Thuong *et al.,* 2023). The definition of firm performance is a problematic topic because it varies depending on the point of view on which it is evaluated.

Therefore, this study adopts the definition presented by (Ofurum *et al*., 2019), which states that performance reflects the results of the organization according to two main dimensions, the dimension of financial performance and non-financial performance.

The BSC is an example of such a performance measurement tool that has gained popularity in practice and literature (Bouchetara *et al*., 2021). Enterprises are now establishing goals relative to customer satisfaction, product defect rates, lead time to market, and environmental and social responsibility. Such goals are not measured directly by income levels. Enterprises producing poor-quality goods, delivering late, abusing the environment, or generally creating dissatisfaction among their customers will lose market share and be forced out of business. The BSC process is focused on the second perspective. Its objective is to provide a strategic snapshot of managing a business through a vision, mission, and strategies, including measuring performance by incorporating both financial and nonfinancial views.

### *2.1.4 Performance and the Balanced Scorecard*

The typical employee does not understand the organization's strategy and consequently fails to focus on the right things; does not know his or her personal role in accomplishing the strategy and as a result does what is required, not what is needed. In such a corporate environment, organizational sub-optimization is the result of sub-organizational optimization. (Hellal and Tagraret, 2023) suggested that the BSC can help remedy this situation because it requires organizations to engage in several beneficial activities. These activities delineate the major strengths of the BSC. Performance measurement incorporating non-financial measures has been a topic of great interest throughout most of the 1990s.

This is because non-financial measures overcome the limitations of just using financial performance measures. Soft measures, such as employee satisfaction and commitment, are coming to the fore as protagonists of the business performance measurement revolution urge organizations to complement their traditional financial focus with softer data. Kaplan and Norton (1992) suggested that what is needed is a balanced presentation of both financial and operational measures. Meanwhile, BSC translates an organization's' mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system (Lasisi *et al.*, 2014).

## 2.2. Theoretical Review

The resource based theory forms the theoretical foundation for this study.

This theory was developed by Barney (1991). This theory was developed and made known because of the need to develop and improve performance of organization. The essential philosophy behind this theory is that performance of organization is associated with the level of skills and experiences acquired by employees or the entire organization. In general, resource-based theory is connected to the total workforce of company. This theory was formulated because the growth in performance of companies could not be achieved if the entities are not equipped with the essential knowledge to drive the performance in a given business environment. According to Barney (1991), the essence of continuous improvement in knowledge in organization is to achieve competitive advantage which could help companies to withstand the shock or rivalry firms in the same industry (Lasisi *et al.*, 2014). For the fact that employees in a company is part and parcel of the growth of the company, resource-based theory is concerned with the level of knowledge acquired by the entity to achieve competitive advantage. Resource based theory is derived from the thought of organizational economics and strategic management (Hellal and Tagraret, 2023). Essential ideas behind resource- based theory is that the prosperity of an entity is connected to the ability to sustain competitive advantage achieved. This simply means that when an entity achieves a certain growth in a given accounting period, the ability to continue in that process is fundamental to sustain the growth in performance of the organization. Resource-based theory has basically four (4) components known as value, rareness, imitation and organization.

Value is seen as the ability to create or improve upon productivity or performance in organization through human resource investments or other techniques of managing resources. Rareness is simply known as the ability to optimally enhance competitive advantage through effective management of human resources better than rivalry companies (Bouchetara *et al.*, 2021).). Rareness is the ability to do exceedingly and exceptionally more than other entities in the same industry. Imitation distinguishes the strength of labour force of one organization from another. Imitation simply means that the level of business process perspective of a company cannot be imitated by another entity. Organization is regarded as the ability to arrange the programmes and structure of operating activities of a particular company differently from others in the same industry. Organization simply means that the structure of one company cannot be the same with the structure of others. The four (4) key components in the resource- based theory are vital resources to achieve competitive advantage.

According to Barney (1991), resources of organization is defined as the workforce of the company. It includes the level of knowledge acquired by employees in the company. The association of resources of organization to workforce of the entity brings about learning and growth perspective. This is because learning and growth perspective is connected to the level of knowledge acquired by organization to be able to raise performance (Ofurum *et al.*, 2019). Based on this theory, the process of achieving competitive advantage is through human resource management as well as management of other resources. With this, business process perspective of companies is improved and improvement in customer perspective usually brings about improvement in financial performance indicators. Balanced scorecard and financial performance of quoted consumer goods companies in Nigeria is related to this theory because the vital elements of balance scorecard are seen in the theory. For this reason, the resource-based theory is adopted in this study.

## 2.3. Empirical Review

Related studies conducted both locally and internationally were reviewed and these included the following:

Lasisi *et al*. (2014) conducted a study on an exploratory study of relational capabilities and balanced scorecard in the Nigeria manufacturing firms. This study investigated the relationship between relational capabilities and balanced scorecard in the Nigeria manufacturing firms. A survey research method was used to generate data from employees working in various manufacturing firms in Nigeria. Simple and systematic sampling techniques were used to generate data from employees working in various Nigeria manufacturing firms. Responses from survey were statistically analysed using descriptive statistics, product moment correlation, and regression analysis with statistical package for social sciences (SPSS V.20). The results of the study confirmed that a statistically significant relationship existed between relational capabilities and balanced scorecard in the Nigeria manufacturing firms. Thus, it suggested that firms should develop a good business relationship with their customers, develop good motivational skills and generally increase firm's performance.

Emmanuel *et al*. (2017) assessed the impact of balanced scorecard on firm value of quoted manufacturing companies in Nigeria. This study sought to assess the effect of Balanced Scorecard (BSC) on firm value based on evidence from quoted manufacturing companies in Nigeria. Secondary data constituted the main source of data collection. These data were obtained from annual reports of companies quoted on the Nigerian Stock Exchange from the year 2011 to 2015. Research tools such as descriptive statistics and multiple Square

Regression analysis were used to establish the impact of Financial, Business process, Customer and Learning and growth perspectives on Firm value. The findings from the analysis showed that firms with low business process perform significantly better and are valued higher than those firms with high business process. Thus, the study encouraged firms to implement Balance Score Card (BSC) since the adoption of merely one or two BSC attribute has proved to improve the organisational value.

Alhassan *et al*. (2018) conducted a study on application of balanced scorecard in Nigeria: Evidence from manufacturing companies in Kano state. This study assessed the application of Balanced Score Card (BSC) in manufacturing companies in Kano State. The population of the study was plastic manufacturing companies in Kano State. A random sampling technique was adopted to arrive at the sample of seven (7) companies selected from the plastic manufacturing companies. A total of twenty-eight (28) copies of questionnaire were distributed to the management of the sampled companies (4 each to every selected company) out of which twenty-five (25) copies which represent 89% were completed and returned. Descriptive statistics, Kruskal Wallis were used as techniques for data analysis. The study concluded that manufacturing companies recognize the importance of using BSC for assessing their performance. However, the use of the full structure of BSC comprising its four perspectives is not effective in some companies especially the learning and innovation perspective. The study recommended that there is need for full application of BSC structure in all the manufacturing companies to enable them to maintain high level of performance and achieve their business objectives.

Ofurum *et al.* (2019) assessed balance scorecard and financial performance: Evidence from Nigerian consumer goods manufacturing companies. This study examined the effect of the balance scorecard on financial performance of consumer goods manufacturing companies in Nigeria. Ex Post Facto research design was adopted, and the data were collected from annual reports and accounts of consumer goods manufacturing companies in Nigeria. Simple regression analysis was used to test the formulated hypotheses with aid of SPSS version 20.0. Based on this, the study revealed that learning and growth perspective, customer perspective and company's business process perspective affected return on assets of consumer goods manufacturing companies in Nigeria. Meanwhile there was a statistically significant effect between the dependent (return on assets) and independent variables (learning, customers and business process perspectives). The study therefore recommended among others that the customers need to be involved more in decision making to make them feel cherished and to continue giving business to the organization instead of the competition.

Osewe (2019) examined balanced scorecard adoption rationale and organizational performance of state corporations in Kenya. The purpose of this study was to examine the relationship between rationale for balanced scorecard adoption and organizational performance of state corporations in Kenya. The research design employed in this study is descriptive design. A systematic explanatory cross sectional survey design was used using two stages, stage one involved administering a survey questionnaire while stage two secondary data collection, using a secondary data collection tool. The relationship between individual independent variables and dependent variable was analysed using t- test. Hypothesis was tested using ANOVA F-test, and a multiple regression analysis for the combined effect of rationale for BSC adoption on organizational performance. Regression analysis was conducted on secondary data to corroborate the findings in stage one. The findings indicated that the overall model was statistically significant. Further, the findings indicated that rational choice, institutional and management fashions rationales of BSC adoption are good predictors of organizational performance of state corporations in Kenya.

Bouchetara *et al.* (2021) examined the impact of contingency factors on the balanced scorecard adoption: Evidence from Algeria. The study aimed to analyse the existence of significant relationships between some contingency factors and the degree of adoption of the balanced scorecard. A quantitative study, based on a survey, was conducted among one hundred and eighty-six (186) individuals, belonging to different Algerian enterprises, from different sectors. Only 57 responses were obtained, that 43 were complete and usable. Otherwise, we obtained a response rate of 23.12%. The results indicated that only three contingency factors (age, differentiation strategy and competition intensity) are found to be significantly associated with the degree of use of the balanced scorecard indicators. Thus, it was concluded that the adoption of the balanced scorecard increases with the rivalry of firms in the markets, with the degree of diversity of their products/services and that older and more mature firm are more likely to use this tool.

Hellal and Tagraret (2023) investigated the impact of balanced scorecard adoption on performance of Algerian manufacturing firms: A contingency approach. This study sought to determine the effect of contingency variables on adopting the balanced scorecard in Algerian manufacturing companies, as well as the impact of these companies adopting the balanced scorecard on their financial and non-financial performance. This study was devised on the presumptions of Contingency theory, and it included a sample of forty-one (41) Algerian manufacturing companies. Path analysis models based on Partial Least Squares were relied on in order to analyse data collected by the questionnaire and test study hypotheses using the software SmartPLS 3. The study reached several results; the most important of them was that there was no statistically significant correlation when it comes to environmental uncertainty and competitive intensity on the adoption of the balanced scorecard. There was, however, a positive correlation between company size and the ability to adopt the balanced scorecard. Furthermore, the study concluded that adopting balanced scorecard does not possess a direct effect on financial performance indicators; it had, however, a positive effect on improving non-financial performance indicators in Algerian manufacturing companies. The study recommended that companies move towards the integration of modern management approaches, and that based on sound scientific foundations and presumptions in order to improve their performance.

Thuong and Singh (2023) investigated the impact of a balanced scorecard on enterprise performance in Ho Chi Minh city. The intention of the researchers was to examine the impact of balance scorecard on performance of enterprises. The suitable sample size for testing this study's model was 265 Vietnamese enterprises, all applying the BSC in their business administration. The data were collected using a questionnaire survey administered to the Vietnamese enterprises in Ho Chi Minh City (HCMC). The information was gathered through a questionnaire survey distributed to Vietnamese businesses in HCMC using a convenience sampling technique. The data was input into SPSS to test the study's model and hypotheses. The study outcomes indicated a significant relationship between BSC usage and the enterprises' performance. When enterprises changed key factors in the BSC, their overall performance level also changed. The study's results also indicated that enterprises' overall performance can have financial and nonfinancial components. Based on the results, the researcher recommends that Vietnamese enterprises can reference and apply the valuable data and knowledge provided by this study to restructure their strategic management. Thus, they could attain higher overall performance in their business, management, operational, and manufacturing sectors.

## 3. METHODOLOGY

The population of the study comprised the quoted consumer goods companies in Nigeria whose stocks were traded on the stock market of Nigeria regarded as Nigerian Exchange Group (NXG). The quoted consumer goods companies in Nigeria as at 31st December, 2022 were twenty-one (21) considered by the researcher in this study as the population. For this reason, the population of this study was twenty-one (21) quoted consumer goods companies in Nigeria.

The sample size of this study was drawn from the population of twenty-one (21) quoted consumer goods companies in Nigeria on the floor of NXG. Fifteen (15) quoted consumer goods companies were drawn and sampled for the study from the sub-sector of manufacturing entities in Nigeria considered in the study. The quoted consumer goods companies used as the sample size were those with available data for the relevant variables of the study and for the period chosen as well as the researcher being able to retrieve the annual reports and financial statements. The purposive sampling technique was used in the study.

The dependent variable of this study was financial performance (FP) measured by return on assets (ROA), and the independent variable was balance scorecard decomposed into Learning and Growth Perspective (LGP), customers' perspective (CP) and business process perspective (BPP). From the variable description, the justification for the adoption of the linear regression technique in establishing the influence of independent variables on dependent variable was clearly observed.

To determine the effect of the balanced scorecard on financial performance, the functional model formulated for this study is expressed as:

$$ROA_{ij} = \beta_o + \beta_1 LGP_{ij} + e_t \quad (3.1)$$

$$ROA_{ij} = \beta_o + \beta_1 CP_{ij} + e_t \text{ Equation (3.2) } ROA_{ij} = \beta_o + \beta_1 BPP_{ij} + e \quad (3.3)$$

where: i=Number of companies; j=Number of years and $e_t$= Error terms.

The relevant data collected in accordance with the respective variables of interest were analysed basically by descriptive statistics and multiple linear regression. Precisely, the panel regression approach was employed. All regression analyses were conducted based on 5% level of Model Specification The following logistic regression model will be used to test the formulated hypotheses: Analyses were done with the aid of E-View-10.

## 3.1. Descriptive statistics of Variable

To describe the nature of the sourced data, the descriptive statistics for each variable were computed as present in table I

**Table 1: Descriptive Statistics**

| Statistic | ROA | LGP | CP | BPP |
|---|---|---|---|---|
| Mean | 40.8328 | 7.3320 | 1.3732 | 1.0578 |
| Median | 6.4770 | 7.4530 | 1.1630 | 0.8210 |
| Maximum | 877.421 | 9.2610 | 22.7372 | 14.3310 |
| Minimum | 14.4280 | 5.2390 | 0.0450 | 0.0000 |
| Std. Dev. | 124.6851 | 0.8810 | 1.5367 | 1.1986 |
| Skewness | 4.9408 | -0.2219 | 9.8173 | 6.2287 |
| Kurtosis | 28.9822 | 2.3461 | 128.800 | 60.6500 |
| Jarque-Bera | 8985.7410 | 7.2604 | 188844 | 40435.9 |
| Probability | 0.0000 | 0.0002 | 0.0000 | 0.0000 |
| Sum | 11392.3 | 2045.6 | 383.135 | 295.116 |
| Sum Sq. Dev. | 4341879 | 215.6660 | 656.50 | 399.2280 |
| Observations | 150 | 150 | 150 | 150 |

*Source:* Researchers' Computation (2023)

ROA: Return on Assets; LGP = Learning and Growth Perspectives, CP – Customers perspectives and BPP = Business Process Perspective

From the Table 1, the mean values, median values, maximum values and minimum values were all positive as well as the standard deviations, kurtosis, Jarque-Bera, Sum and sum square deviations. This implies normality of the data set as well as the positive inclination of the relationship between the variable of the study.

## 3.2. Co-Integration Analysis

To Assess the long-run relationship, the Engle Granger Co-Integration Test was conducted on the data and result presented in Table 2.

**Table 2: Engle Granger Co-Integration Test**

| *Dependent* | *Tau statistic* | *Profit* | *Z-Statistic* | *Prob.** |
|---|---|---|---|---|
| LGP | -9.336070 | 0.0000 | -98,15811 | 0.0000 |
| ROA | -4.394074 | 0.0000 | -94.80999 | 0.0000 |
| BPP | -9.720178 | 0.0000 | -102.5680 | 0.0000 |
| CP | -9.721247 | 0.0000 | -102.5809 | 0.0000 |

* Mackinnon (1996) P- Values

### Intermediate Results

| | *LGP* | *ROA* | *BPP* | *CP* |
|---|---|---|---|---|
| Rho-1 | -0.884307 | -0.245410 | 0.924036 | -0.924152 |
| Rho S. E | 0.094719 | 0.055850 | 0.095059 | 0.095065 |
| Residual Variance | 11.30276 | 7339.596 | 2.24E-07 | 2.24E-07 |
| Long-ran Residual Variance | 11.30276 | 95681.67 | 2.24E-07 | 2.24E-07 |
| Number of bags | 0 | 4 | 0 | 0 |
| Numbers of observations | 150 | 150 | 150 | 150 |
| Number of stochastic trends** | 4 | 4 | 4 | 4 |
| ** number of Stochastic trend in asymptotic distribution | | | | |

*Source:* Researchers' Competition (2023)

From the Table 2, the Engle Co-integration test indicated that all the variable of ROA, LGP, BPP and CP demonstrated long-run relationship with one another in the multiple linear regression model as the p-values for both tau-statistic and Z-Statistic are less than the error level of 0.05.

## 3.3. Regression Analysis and test of Hypotheses

The multiple regression results for the test for hypothesis is presented in Table 3.

**Table 3: Multiple linear regression result**

| Variable | Coefficient | Std. Error | **T-Statistic** | **Prob.*** |
|---|---|---|---|---|
| LGP | 193.411 | 31.41489 | 6.15667 | 0.0058 |
| BPP | 152.004 | 36.64234 | 4.14832 | 0.0024 |
| CP | 185.787 | 25.97090 | 7.15366 | 0.0082 |
| C | 28.2987 | 52.47247 | 0.539305 | 0.5908 |
| R-Squard | 0.72785 | Mean dependent var. | | 56.61039 |
| Adjusted R-squared | 0.713426 | S. D dependent var. | | 177.5549 |
| S. E of regression | 177.8204 | Akaike Info Criterion | | 13.243044 |
| Sum squared resid | 3383349 | Schwarz Criterion | | 13.36440 |
| Log likelihood | 26.16103 | Hanna-Qunn Criterion | | 13.29228 |
| F-statistic | 24.17202 | Durbin-Watson Stat | | 0.333826 |
| Prob (F-Statistic) | 0.000799 | | | |

*Source:* Researchers' Computation (2023)

## 4. DISCUSSION OF FINDINGS

From the empirical studies reviewed, it was observed that learning and growth perspective, customer perspective and company's business process perspective affect return on assets of consumer goods companies in Nigeria. Meanwhile there was a positive and significant association between the dependent (return on assets) and independent variables (learning, customers and business process perspectives) from previous studies. This result was in line with Thuong and Singh (2023) evidence from Dutch firms suggests that BSC use will not automatically improve company performance, but that the manner of its use matters. Alhassan *et al.* (2018) study concluded that balanced scorecard has contributed to improve the performance and profitability for the businesses that have adopted the model (Hellal and Tagraret 2023). Result of the study confirms that a statistically significant relationship exists between financial performance capabilities and balanced scorecard in the Nigerian consumer firms.

## 5. CONCLUSION AND RECOMMENDATIONS

The study found that financial perspective does not affect return on assets of consumer goods companies in Nigeria, while customer perspective and company's business process perspective affect return on assets of consumer goods companies in Nigeria. Meanwhile there is a statistically significant effect between the dependent (return on assets) and independent variables (learning and growth, customers and business process perspectives). This indicated that the companies are meeting the expectations of its shareholders, delighting or at least satisfying its customers and that the companies are doing the right things. Despite opposing views of supporters and critics for the use of balance scorecard, it is important to note that model is broadly acceptable framework for the measurement of performance as it points out the two measurements of financial and nonfinancial performance translates a business strategy into operational terms. Based on the results of the empirical studies and the analysis carried out, conclusively, balanced scorecard has contributed to improve the performance for the businesses that have adopted the model.

Based on the findings, the study made the following recommendations:

(i) Consumer goods companies in Nigeria should consider the issue of cost of production to make it profitable and must improve on its cost minimization strategy. ii. The customers need to be more involved in decision making to make them feel cherished and to continue giving business to the organization instead of the competition. iii. There is need to review the strategic plan to aim for financial sustainability and to see how to improve on the human resource management.

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