Non Financial Perspectives and Firms' Value of Deposit Money Banks in Nigeria

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ABSTRACT

The purpose of this study is to examine the effect of non-financial perspective of balanced scorecards and firm value of deposit money bank in Nigeria. Secondary data from respective annual reports of selected deposit money banks in Nigeria for the period of ten years spanning from 2010-2020 were used for analysis while descriptive statistics and panels were employed for data analysis. Three hypotheses were formulated to guide the study. One regression model was examined in order to test the hypotheses included in the research framework of the study. Firm‘s value is the dependent variable of the study and is measured by Tobin‘s Q and non financial perspective is the independent variable proxy with learning and growth (human capital), internal business process (operational efficiency), and Customer satisfaction (turnover). The results show that learning and growth (human capital) and internal business processes are positive and significantly associated with Tobin‘s Q while Customer satisfaction (turnover) is not significantly associated with Tobin‘s Q. Therefore, the study recommended that banks should seriously involve their staff in research and development programme for them to be current with the technology advancement which ultimately improves the worth of the banks.

INTRODUCTION

The aim of any business organization is to maximize profit by devising ways of sustaining the economic benefits generated. Organizations benefit so much on assets that can help to generate income and enhances the value of the firm. Globally, economy is facing downturn after the Covid-19 saga, this made many companies to struggle to stay afloat and persist notwithstanding high competition in the business environment. Banks are not left out of this challenge, deposit money banks in Nigeria are faced with numerous problems like sustainability problems, liquidity problems and poor governance and this leads to poor performance (Olaoye & Akingbade, 2020). Economists reflect on the contemporary business environment as well as the important function of non financial items in valuing a firm. (Meritum, 2001).

Traditionally, valuation of firm‘s performance is based on the financial perspective. It is believed that only financial perspective of organization gives true and overall picture of the organization. Some scholars have argued on the importance of non financial items as a tool for measuring performance. However, performance measurement is an integral part of management accounting (Emmanuel & Otley, 1995) cited in Okoye, Odum and Odum (2017). For many years, management accountants use the financial position to measure performance in the same way financial accountants measure profitability. For decades companies are fixed with the traditional measurement of financial performance which deals only on financial items until late 80‘s when series of globalised competition forced many firms to consider non traditional measures as a means of performance measurement of organizations (Okoroafor, 2016). This measurement, according to them gives more in depth picture of the firm. Therefore non financial measurement is more about intangible items that can help to improve and sustain the capital base of the firm for a long period. The nature of business environment has become increasingly futuristic, which makes management of firms to think outside the box. This also has propelled management accountants to become more future- oriented resulting to the assessment of performance based on financial and non financial information. However, Ibrahim (2015) asserts that in order to ascertain accurate financial performance of any organization, traditional measures of financial performance should be discarded while contemporary measures should be adopted for measuring financial and non financial items. Kaplan and Norton (1992) stated that contemporary performance measure should include both financial and non financial items. This measure is referred to as balanced scorecard. Balanced scorecard is strategic management system that enables establishments to state their vision, strategy and also translate them into action. Balanced scorecard has four perspectives which are financial, internal process, learning and growth and customer satisfaction. While financial aspect of balanced scorecard perspectives measures the organizational effectiveness which covers the financial and operational turnover of the firm, non financial perspective measures the intangible items and its contribution to the revenue of the organization. Non financial perspective of the balanced scorecard consists of three aspects, which are internal business process which deals with organizational process that leads to the enhancement of revenue of an organization. Learning and growth is another aspect of non financial perspective of balanced scorecard that helps organization to outweigh other competitors depending on the capability of their personnel. When an organization employs high skilled staff and technological experts, it helps to improve the profitability of the organization as well as enhance the reputation and worth of the organization.

Finally, customer satisfaction aspect of non financial perspective of balanced scorecard, adopts a strategy that attracts and sustains customers by their services which helps to enhance revenue in an organization. According to Kaplan and Norton (1992) this measure gives adequate and accurate information on performance of an organization. This contemporary measure for performance and firms ‘value is getting attention across the globe in many establishments including hospitals, manufacturing firms and banks but the awareness of this measure is still limited in Nigeria.

The emerging technological advancement in the business environment has forced many organizations across the globe to engage on non financial items in order to stay afloat in the competitive business environment. Many scholars like Ruiwen and Honghui (2010) and Widantoro (2002) have argued that non financial items are not measurable and will not have the ability to create sustainable competitive advantage in the contemporary business environment. Researchers Ofurum, Onuoha and Nwaekpe (2018), Chukwu and Salifu (2010) Razie and Salehi (2015), Okoye, Odum and Odum (2016), Bhatia and Aggarwal (2018) debunked the study that discredit the usefulness of non financial items in evaluating the firms ‘value. Though, the study acknowledges evidence of existing literature but it is mainly domicile on developed countries and few studies in developing countries like Nigeria. Besides, none of the reviewed works covered up to 2020. It is on these gaps that the study is considered essential. The study bridged the gap by investigating on the effect of non financial perspective and firm value of deposit money banks in Nigeria. The study clearly disaggregates the variables spanned for 10years (2010-2020). Finally, multiple and panel regression was adopted to analyze the result. 5

Objectives of the Study

The general objective of the study is to investigate the effect of financial perspective of balanced scorecard on firms ‘value of deposit money banks in Nigeria. However, the study specifically examines the financial

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perspectives of balanced scorecard. They are as follows; to

1. evaluate the effect of learning and growth on firms ‘value.
2. ascertain the effect of customer retention/satisfaction on firms ‘value.
3. examine the effect of internal business process on firms ‘value.

Research Questions

The following research questions were formulated to answer the objectives of the study;

1. What is the relationship between learning and growth and firms ‘value?
2. To what extent does customer ‘s retention/satisfaction affect firms ‘value?
3. To what extent does internal business process affect firms ‘value?

Research Hypothesis

In line with the objectives of the study, the following hypotheses are formulated in null form;

Ho1 Learning and growth does not have any significant relationship on firm value.

Ho2 Customer satisfaction does not have significant effect on firm value.

Ho3 Internal business process has no significant effect on firm value.

Scope of the study

The study is designed to investigate the effect of non financial perspective of balanced scorecard on the firms ‘value of deposit money banks in Nigeria. It covers the period of ten (10) year 2010 to 2020. The study intends to select the deposit money banks because of its peculiarity in the enhancement and contribution towards the economic growth in Nigeria. The study covers some quoted deposit money banks in Nigeria Stock Exchange (NSE). The dependent variable of the study is represented by firms ‘value which is proxy with Tobin ‘sQ while the independent variables of the study is non financial perspectives of BSC proxied with (human capital: (personnel cost for Learning and growth)), customer satisfaction with revenue and Internal business process proxy with operational efficiency. The deposit money banks selected for this research are Access Bank, Fidelity Bank, WEMA Bank, Guarantee Trust Bank and First City Monument Bank. These banks were selected because they reported all the variables that were required for this study.

Conceptual Review

This section discusses extensively conceptual issues associated with the study. It covers both concepts and components of the dependent and independent variables used in the study.

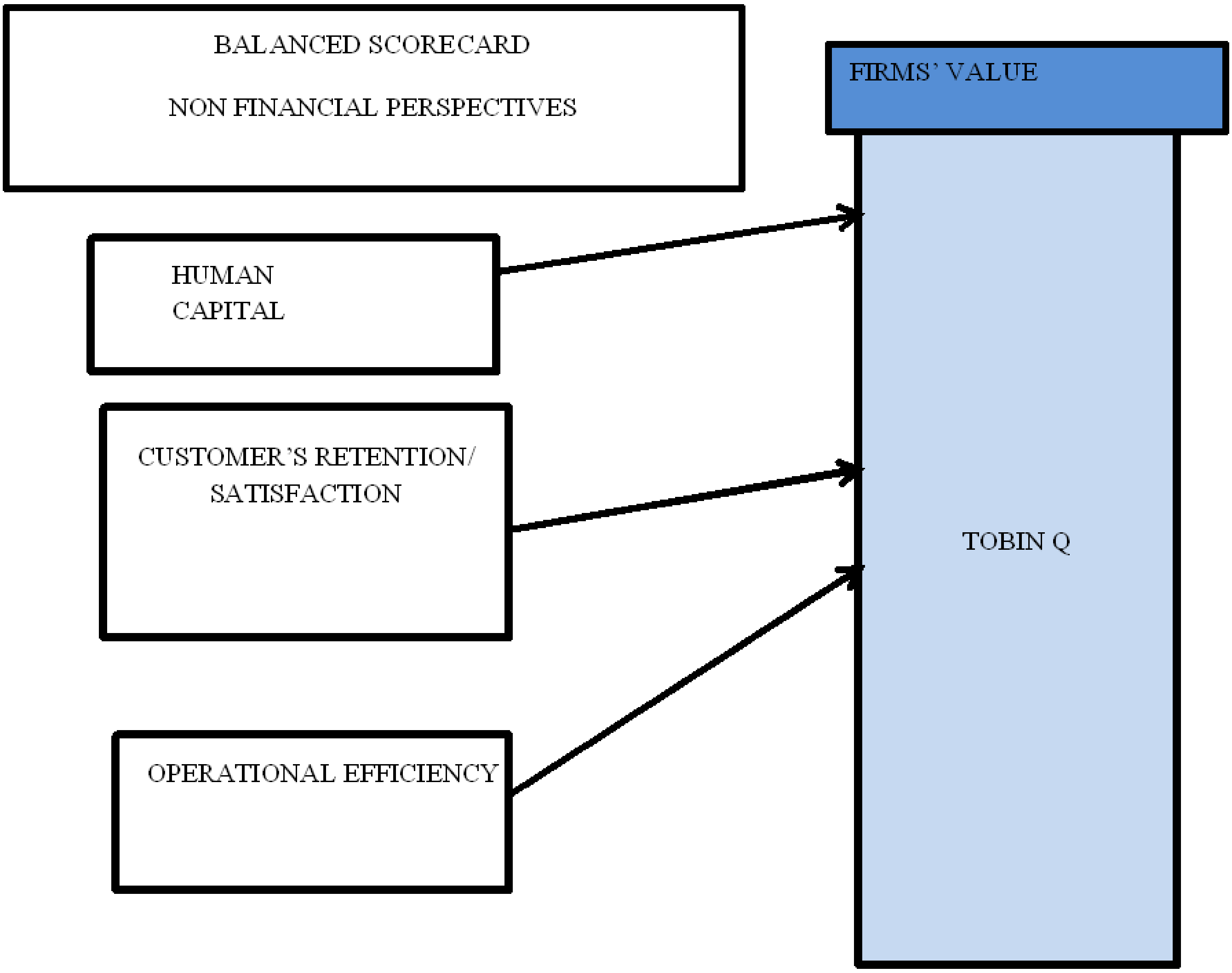
CONCEPTUAL FRAMEWORK

The study intends to discuss the concepts and theories that are involved on non financial perspective and firms ‘value of deposit money banks in Nigeria. Conceptual framework is the network that linked the concepts together to provide a comprehensive understanding of the variables used in the study. According to IFRS (2014) Conceptual framework is a visual representation that helps to illustrate the cause and effects of dependent and independent variables. It is an analytical tool.

OPERATIONAL CONCEPTUAL FRAMEWORK

This section simplifies and summarizes the main concepts that are used for the study for easy understanding. Research model and a strong operational conceptual framework leads to actual realization of the research objectives (IFRS, 2014). For the purpose of clarification and understanding, the study will adopt this operational conceptual framework as guide for the objective of the study.

Fig 1 Operational framework of Non financial perspective of BSC



Source: Researcher, 2021

Firms' Value

Firm value is defined as the total value of company's stock. It represents the assets owned by the establishment. According to Nurlela and Islahudiri (2008), firm value is refers to market value of a firm. Firms 'value is considered as being very important, since it describes prosperity of the shareholders or owners of the company. Since managers handle and oversee the operations of the company, they are to be held responsible for optimal firms 'value (Nuru, 2004). Good firms 'value often attracts investors to the company (Adenugba, Ige & Kesinro, 2016). Firm's value is an economic concept that reflects the value of a business. It is the value that a business is worthy of at a particular date.

Theoretically, firm‘s value is an amount that one needs to pay to take over a business entity. The value of a firm can be determined on the basis of either book value or market value. Modigliani and Miller (1958) cited in Mohammed (2007) stated that firm value is determined by the company asset earning power. This factor helps to determine the turnover efficiency and enhances profit value. However, the traditional or conventional researchers believe that assets and profit influence firm value positively. Some studies opine that other factors that can influence firm value are firm wealth, environmental factors and organizational structure (Kayali, Yereli & Ada, 2007). On the other hand, others argue that customer retention and satisfaction, technology usage, management understanding, human resources affect firm value (Sullivan, 2013, Rubera, 2017, Duzzar, 2008). According to Guleryuz (2009), firm‘s value is the acquisition and sales value of the company anticipated by potential buyers and sellers with adequate information about the company. This implies that the study of firm value is important in business process. This is the reason why some researchers like (Okoye, Odum & Odum, 2014, Adenugba, Ige & Kesinro 2016) adopt tobin‘s Q as a measurement tool for firm value. Tobin‘s q is economic theory of investment behavior where q represents the ratio of the market value of a firm‘s existing shares (share capital) to the replacement cost of the firm‘s physical assets. Leans (2019) posits that the most reliable and straightforward way to determine a company market value is to calculate what is called market capitalization which represents the total value of all shares outstanding.

Market capitalization is defined as a company‘s stock value multiplied by the total number of shares outstanding. Market capitalization is used to measure the overall size of a company. The main objective for companies going public is to enhance welfare of shareholders and promote the value of the firm. The value of the firm is important because it helps to improve the welfare of shareholders. According to Mohammed (2017), welfare of shareholders and firm value are mostly represented on the stock price, which simply represents asset management, financing and investment decision. The stock price used by investors or shareholders usually is the closing price (Evans, 2005).

Firms ‘value measurement can be done by the extent of movement of share price in secondary market. If there is an increase in share price then it means that there is increased firm value, because the firm value means value of share market added by the value of obligation market or long term debts. Increased share value shows better public trust in the company, so that they can pay higher. According to Okoye, Odum & Odum, 2014 firms‘ value can be measured using Tobin‘s Q. Tobin Q is one of the strongest and reliable measurement tools used to measure firms‘ value. . Therefore this research is proxy with Tobin‘s Q.

Tobin’s Q

Tobin‘s *Q* was developed by J. Tobin in 1969 to measure firm performance. It is the ratio of the market value of the firm to the book value of its assets (originally the replacement value). Tobin‘s Q, also known as Q theory or Q ratio, is the ratio between the market value of a physical asset and the replacement value. It is a theory of investment behavior in which q represents the ratio of a company‘s existing shares (share capital) to the replacement cost of its physical assets which is the replacement cost of the share capital. According to Business Dictionary (2021) tobin‘s Q is economic theory of investment behavior where q represents the ratio of the market value of a firm‘s existing shares (share capital) to the replacement cost of the firm‘s physical assets. The Tobin q is used in firms to explain a number of diverse company trends. These involve (a) cross-sectional differences in investment and diversification decisions (b) relationship between managerial equity ownership and firm‘s value (c) relationship between managerial performance and tender offer gains, investment opportunities and tender offer responses, and (d) financing, dividend, and compensating policies (Chung & Pruitt, 1994 cited in Wolfe & Sauaia (2003)). It is a statistic that might serve as a proxy for the firm value from an investor’s perspective. By definition, it is the ratio between the market value of the firm’s assets and the replacement value of those assets.

Mathematically

Tobin‘s Q = Market Value of Equity +Book Value of Total Debt Book Value of Total Assets

This ratio shows an increase in the unit value of the cost of purchasing assets to create value. When the ratio is less than 1, buying or replacing newly generated capital goods is worse than buying ready-made capital goods, thereby making further investment impossible for a company which results to low or non-existent investment opportunities. In practice, Tobin‘s *Q* measurement method varies with different research purposes. This study is based on the ratio of the market value of equity to the book value of total liabilities and that of total assets. The theory states that when q is greater than 1, investing in the company is recommended, when q is smaller than 1, selling the investment is recommended according to q theory. This means that companies with high Tobin‘s Q or q > 1.00 indicates better investment potentials, has high growth potentials, and indicates better management as seen from the asset management (Barontini & Caprio, 2006). On the other hand companies with q < 1.00 indicate that sustainability of company is questionable and investors find it difficult to invest in such companies.

Non Financial Perspectives of Balanced Scorecard

The Balanced scorecard measures four perspectives which are financial, and non financial perspectives. The BSC particularly advocates the need to apply both financial and non-financial measures in evaluation of the firm value (Wafula, Odera & Akerele, 2013). The success of balanced scorecard in an organization depends on how is be applied and its implementation by the management (Bourne, 2002). The non financial balanced scorecard consist of three perspectives namely; learning and growth, internal business process and customer satisfaction. Non financial measure of balanced scorecard viewpoint of firm value is characterizes with sustainability, futuristic and stabilization of revenue in an organization (Kaplan & Norton, 1992). This viewpoint decides non financial balanced scorecard technique usage helps to achieve the goals of the organization.

Learning and growth perspective: This perspective of balanced scorecard deals with human capability and its contribution to the development of the organization. Learning is all about technological advancement, creativity and application of artificial intelligent (Kaplan & Norton, 2007).

Internal business process perspective of the balanced scorecard enables supervisors to assess how well their business is running and whether administrations adjust to client necessities. According to Kaplan and Norton (1992), internal business process is all about the operational efficiency of business. Any business that has functional internal process will definitely achieve the mission and vision of the firm.

Finally customer perspective captures the ability of the organization to provide quality goods and services to the clientele, ensure effectiveness in their delivery as well as give an overall quality customer service thus enhancing satisfaction. It is another non financial item of BSC that helps to boast the organization. According to Okereke (2008) customer satisfaction is an instrument that contributes hugely on the revenue of organization. Any firm that satisfies the customers gains their loyalty and retention. This is helps immensely to improve their revenue, reputation and their firm value. 13

Key Performance Index for Measuring four balanced scorecard and Firm value

For the purpose of this study, the researcher adopted the following balanced scorecard with the key performance index for investigating the effects of non-financial perspective and firm value of deposit money banks in Nigeria.

Table 2.1 Key Performance Indices measuring balanced scorecard

S/N	NAME	BSC	STRATEGIC OBJECTIVES	KPI
1.		**CUSTOMER**		
	Kaplan and Norton (1996) Bryant, Jones and Widener Gupta, Maheshwari and Sharwa (2018)		Customer value Satisfaction and retention Business Growth Customer Growth Providing Excellent after sales services Customer Value Customer Loyalty	Customer satisfaction Customer acquisition Customer profitability Market share Total turnover Credit Growth Deposit Growth Customer growth Customer growth Saving A/c Current A/c Customer process Complaint customer Sales/Customer Sales/Revenue
2		**INTERNAL PROCESS**		
	Kaplan and Norton (1992)		Efficiency Quality Efficiency	Operation efficiency Total Asset (Turnover) Cycle time Revenue/Total equity Revenue/Total assets

3		**LEARNING AND GROWTH**		
	Kaplan and Norton (1992) Gupta Meheshwari and Sharm (2008) Sullivan (2013)		Human capital Infrastructural technology. Culture Training and Development Value Added to Sales ratio Capital Share Ratio Wage Value productivity Labour's Value	Employee Satisfaction Employee retention Employee productivity No of Skilled employees Turnover rate R and D Expenses Learning rate Value added per employee Salary/Revenue VA/Total Operating Income Profit before tax/Value added Value added/personnel expense Personnel expenses/Value added

Source: Compiled from published journals

MEASUREMENT INDEX

For the purpose of this study, the researcher adopted the following balanced scorecard with the key performance index for investigating the effects of balanced scorecard on firm value of deposit money banks in Nigeria.

Table 2. 2 Indices for the study

S/N	BALANCED SCORECARD	STRATEGY	KEY PERFORMANCE INDEX	FORMULATE
1.	**Internal Process**	Operational Efficiency	Equity turnover	Revenue/Total Equity
2.	**Learning and Growth**	Human Capital	Training and Development	Personnel Expenses
3.	**Customer**	Customer satisfaction and retention	Sales growth	Revenue

	Firm Value		Tobin's Q	Net Profit/shareholders equity

Source: Researcher, 2021

Non-Financial Measures and firm value

Non-financial measure is futuristic. They are indicators that provide important information on future performance that not ordinarily in the accounting measures Kaplan and Norton, 1992). Non financial is mainly for value creation activities (Kaplan & Norton, 2001). The main objective of non financial perspective of balanced scorecard is the sustainability of firms with variables like Learning and growth, customer satisfaction and internal business process which helps to enhanced firm value, reputation and financial performance of organizations. Globalization trend business change, advancement technology and healthy competition have made firms to consider the use of non financial measures to combat the challenges facing business world. This contemporary measure referred to as the balanced scorecards (Kaplan & Norton, 1996). According to Okoye, Odum and Odum (2016) balanced scorecard serve as a key index that enables firms to define and disseminate its concerns to interested groups like investors, financial analyst, managers, staff and the public. Debates are still ongoing relating to the instrument of balanced scorecard for evaluation of firm performance. According Zuriekat, Salameh, and Alrawashdeh, (2011) reported that non-financial measures are used as helps to give in depth picture of the financial performance. Hence the use of a combination of the two measures has become a popular framework in different fields. A combination of the two is essential to give a more balanced impression of the overall performance of an organization. Investors are therefore, expected to select the combination of measures that will result to effective measurement and give true picture of the organization. The present study therefore, seeks to investigate on the effect of non-financial perspective on firm value of deposit money banks in Nigeria.

Customer Satisfaction and Firm Value

Companies are always in competition and organizations try to outweigh others by building products and device means to attract customers and improve customer loyalty to their organization. Customer satisfaction is one of the methods investors use to measure firm competitiveness and marketing performance, (Morgan, Anderson & Mittal, 2005), as well as an influential performance metric (Kaplan & Norton, 1996). Many firms attempt to measure customer satisfaction in order to evaluate whether they meet their customer needs better than their competitors (Fornell, Mithas, Morgeson, & Krishnan, 2006) Strong customer satisfaction and retention techniques enhance the firm value and attract investors. According to Fornell, Mithas, Morgeson, & Krishnan (2006), measuring customer satisfaction and retention gives a very clear picture of the position of the firm. This implies that basing assessment on only financial position of any organization does not depict the true stand of the organization. Theoretically, it can be assumed that increasing customer satisfaction is more likely to bring positive outcomes such as increasing sales volume and market share. Thus, marketplace outcomes such as sales or market share have become a traditional method of evaluating the success of marketing strategies (Lehmann, 2004).

Learning and Growth and Firm value

According to Kaplan and Norton (1992) learning and growth perspective examines the ability of employers (skills, talents, knowledge and training), the quality of information system (systems database and network) and the effects of organizational style (leadership style, culture orientations and teamwork) in supporting the organizational goals. Any company with a defined structure in line with the model of Kaplan and Norton (1992) will have a high value and competitive advantage among other companies. This perspective holistically measures employee satisfaction, knowledge base, level of technological advancement among staff and employee retention. This is the reason why balanced scorecard shifted from the traditional method of measuring performance and valuation of worth of organization. It is important for analysts and investors to value financial and non financial items to ascertain accurate value or worth of a company.

Internal Business Process and Firm Value

In a bid to ascertain the value of an organization, it is very paramount to examine the business process or business trend for over a period of time. Kaplan and Norton (1992) focus on the internal business transaction that leads to improvement in financial position and customer satisfaction with a view of achieving operational efficiency which is important and consists of measuring quality and cost related to the business processes.

Theoretical Review

Theories are propounded to explain the importance of evaluating firms from various perspectives using Balanced Scorecard formulated by Kaplan and Norton (1992). Many theories exist to explain reasons why numerous measures should be considered while evaluating company, among which are;

Signaling theory

Signaling theory was propounded by Michael Spence in 1973 based on observed knowledge gaps between companies and prospective employee. This theory emerged from the study of information economics and deals with the notion of information asymmetry of buyers and sellers facing a market interaction. Signaling theory is concerned with understanding why certain signals are reliable while others are not in terms of decision making. The theory looks at the quality and reliability of accounting information sent by a company to users of its accounting information such as potential investors for investment decision. Spence (1973) posited that a well performing firm distinguishes itself from the nonperforming one by sending a credible signal about its performance to capital markets as well as potential investors. Signals sent by a firm are the results of its operating activities which would inform investors about the company's future prospects. The theory assumed that managers and shareholders of a company differ in terms of getting access to some vital information about firm operation. Some information can only be accessed by the managers while the shareholders do not have access to such information. Signaling theory was adopted in this study to underpin firm characteristics represented by firm size, liquidity, operating efficiency, firm growth and leverage because sound liquidity position of a company is showing its ability to meet up with its short term financial need without stoppages in production. Also, effective management and staff would enable a company to maximize operating efficiency of production thereby leading to an improvement in firms financial performance and firm value which by implication is showing a good signal to both current and potential investors that the company can continue to operate in line with the going concern concept of accounting as well as satisfying the interest of its stakeholders through wealth maximization. The argument of the theory is relevant in anchoring the study because it holds that accounting information sends signal to the market which influences the investment decisions. This decision is reflected in the price of stock, which is the value of the firm. Signal theory also explains the reasons why firms need to make available financial report to general public. If the manager has confidence that the firm's prospects are viable, and therefore wants to enhance their share prices, the manager certainly wants to communicate this to investors. Managers can use more debt, which later acts as a more reliable signal. This is because firms that increase debt can be seen as organizations that are confident in the firm's prospects in the future. Investors are expected to catch these signals, signals that indicate that the company has prospective prospects in the future (Mardiyati, Ahmad.and Putri, (2012).

Resource-Based View

The resource based view assumes that sources of sustained competitive advantage are based on the four indicators of firm resources: value, rareness, imperfect limitability and substitutability (Barney, 1991). Firm resources represent the solvency or strengths of the organization, the position that firm can occupy in competitive market and for the firm to pay off their obligation and still maintain reasonable returns for shareholders. Firm resources are helpful and used as a competitive advantage only if they can be identified as valuable, rare, inimitable and non-substitutable (Barney, 1991). Firm resources are not limited to just financial aspects of an organization; it also comprises customers satisfaction, level of education acquired, technological advancement etc. (Barney, 1991; Daft, 1983).

The resources based view perceives the firm as a collection of all available resources and capabilities. The primary task of management is to look for ways to sustain and fully utilize those existing resources and achieve more desired resources, and further enable firms with competitive advantage and superior performance (Grant, 1996). Resources and capabilities build the foundation for firms' strategy on the condition that they direct firms towards their strategic objectives and they are also primary sources of profit. Grant (1991) argues that the resources have an important influence on what firms can do because they place a limitation on the range of what they can perform. Furthermore, the availability of resources is important to firms' ability because the development of the desired capability or competence requires the involvement and coordination of specific resources including physical resources like raw materials and intangible resources like human capital and advanced technological. This study, suggests that these firm resources can be realized by adequate use of management performance systems like balanced scorecard because BSC performance measurement system can provide useful information in all around identification and appraisal of firm resources. Hence, it is recommendable that firm apply balanced scorecard to ascertain the firms resources than basing its assessment on the tradition method. The Resource Based View Theory propounded by Barney (1991) focused on the quality control of inventory of abilities, attributes, internal business processes, knowledge, and skills as conditions for offering excellence customer services that will improve customer's satisfaction and good organizational performance. The application of the theory to the research means that banks should improve on customer satisfaction determinants by being in tone to current technology, adopt quality skills service delivery and knowledge to discharge the duties excellently in line with international best practices and standards. Companies need to invest and improve their material and human resources to help them to achieve competitive advantage in the competitive market. It is the bank that can boost of quality resources in terms of financial assets, fixed assets, operations and system assets that would be best positioned to satisfy their customers, attract new customers, improve their market share and also attain quality performance. Therefore, this theory relates to the study in its advocacy of using balanced scorecard for assessing firm value. Again, the current study assumes that for organizations to ascertain firms' worth, it is very important to assess the position of the four cardinal perspective of balanced scorecard of Kaplan and Norton (1992). This also is the cardinal proposition of the resource-based view theory that canvases for the development of the firm's overall assets that would guarantee improvement in firm's value. Both the tangible and intangible assets must be constantly upgraded and strategically organized in order to bring about improvement in bank industry.

Empirical Review

Okoye, Odum & Odum (2016) investigated the effect of balanced scorecard (BSC) on firm value as evidenced from quoted manufacturing companies in Nigeria. The study used secondary data from annual report of companies quoted on Nigeria Stock Exchange from the year 2011 to 2015. The study employed multiple square regression analysis. The finding showed that effective use of internal business generates value. Firms with low business or internal process generally perform significantly better and are valued higher than firms with higher business process.

Noor, Mseden and Mohammad (2015) investigated the effect of the independent variables (Balanced Scorecard Dimensions) on the dependent variables (ROA and ROE) using Jordanian industrial companies listed on the Amman Stock Exchange for a period of five years from 2008 to 2012. The results stipulate that each one of the balanced scorecard dimensions (internal business processes, innovation and growth and customer) has a significant positive effect on the financial performance drivers ROA and ROE.

Fitria and Hanny (2019) investigated on the influence of non financial perspective of Balance Scorecard, customer perspective, internal business processes and learning and growth, on the financial perspective in banking institutions. The customer perspective, internal business processes, and learning and growth. The study used secondary data with purposive sampling data collection techniques. The sample used in this study was 43 companies that listed in stock exchange indonesia period from 2013 to 2017. The analysis technique used is panel data regression. The findings of the study shows that the customer perspective and internal business process perspective had a positive effect on the financial perspective proxied by the debt to equity ratio, profit margin and return on assets, customer perspective and the internal business process perspective had no positive effect on the financial perspective which is proxied by the current ratio; learning and growth perspective does not have a positive effect on the financial perspective that is proxied by the current ratio, debt to equity ratio, profit margin and return on assets.

Ofuuru, Afodigburokwu and Ezejiofor (2019) carried out a study on balanced scorecard and financial performance: evidence from Nigeria consumer goods manufacturing companies. The study adopted ex post facto research design and secondary data was used. The data was collected from annual report from annual report customer goods manufacturing companies in Nigeria. The research used simple regression test and analysis the hypothesis. The objectives were formulated as well as three (3) hypotheses to guide the research. The research shows that the three perspectives (customer, learning and growth, business process) have significant effect on return on asset. The study recommended among others that there is need to review the strategic plan to aim for financial sustainability and to see how improve of human resource management.

Anand Sahay and Saha (2005) carried out a study on the practice of the organizational performance management system of India with a focus on BSC from 2002 – 2003 using a survey method. The study finds that about 45.28 per cent of the companies are using BSC. Also, initiating the change process in the organization 50 per cent, broadening of the performance measures 45.8 per cent, and facilitating the integration of business plans with the financial plans 45.8 per cent are the major motivations for the implementation of BSC in corporate India.

Harold (2006) applied the BSC to develop a comprehensive performance measurement and a management tool for information technology (IT) in the banking sector in India. His findings clarified how a cascade of balanced scoreboards can be useful in the technology effectiveness of commercial banks in India to guarantee better performance management.

Huang and Lin (2006) examined the performance system of five commercial banks in China. Through investigations and evaluations of the current performance systems of the sampled banks, the authors were able to design a new performance evaluation system based on the BSC.

Dedi, Rani and Yusuf (2018) carried out a study on the effect of net profit, price to book value and debt to equity ratio partially and simultaneously to stock return at Indonesian stock exchange company. The study adopted secondary data using purposive sampling techniques to obtain IQ45 27 companies ranging from 2011 to 2017. The study used classical assumption test, multiple regression and multiple correlations. The results show that partially net profit margin, price to book value and debt to equity ratio have the significant negative effect on stock return on IQ45 company in Indonesia Stock Exchange and simultaneously net profit margin price to book value and debt to equity ratio have no significant effect.

Pourali and Arasteh (2013) investigated on the relationship between liquidity, corporate governance and firm value and content analysis was adopted for the study. The findings show that liquidity has positive effect on firm financial performance. Zulnaidi (2014) investigated on the direct and indirect effects of customer focus on performance in public firms. Primary data were collected from 205 managers within the public service sector, all of whom were directly involved with the process of customer focus. The results of this study revealed that customer focus is a significant predictor of employee satisfaction, innovation, and customer satisfaction. The structural model developed also indicated that there is an indirect relationship between customer focus and customer satisfaction, as determined by employee satisfaction. In addition, the effect of customer focus on innovation is mediated by employee satisfaction. Therefore, this model implies that the practice of customer focus may enable public firms to increase their level of performance.

Baiman and Baldenius (2009) investigate the use of non financial performance measures as a coordination device among divisions. Linking division managers' interests with joint project profitability, they find that the use of non financial performance measures is positively associated with project implementation efficiency.

Noor, Mseden and Mohammad (2015) investigated the effect of the independent variables (Balanced Scorecard Dimensions) on the dependent variables (ROA and ROE) using Jordanian industrial companies listed on the Amman Stock Exchange for a period of five years from 2008 to 2012. The results stipulate that each one of the balanced scorecard dimensions (internal business processes, innovation and growth and customer) has a significant positive effect on the financial performance drivers ROA and ROE.

Taylor (2010) carried out an experimental study on the use of the BSC as a strategy-evaluation tool in mitigating the effects of motivated reasoning where "individuals tend to evaluate and interpret data in ways consistent with their preferences". The results show that BSC has significant effect on motivating reasoning and the study recommend that managers' involvements should be part of the selection of the BSC measures and framing the BSC as a causal-chain.

Zuriekat, Salameh and Nrawasdeh (2015), in their study used structural equation modelling to test their hypotheses in Jordanian manufacturing companies using all the manufacturing companies listed on Amman Stock Exchange. This finding demonstrates that giving employees and managers the rationale to participate when selecting performance measures appears to enhance their outcomes through the provision of system satisfaction.

Gupta, Maheshwari and Sharma (2018) carried out a study on performance evaluation using balanced scorecard model in banking industry. The study used secondary data from annual reports of HDFC bank while standard deviation was adopted for analysis of data. The result shows that the four perspective of BSC contribute immensely to the growth and performance of the selected banks.

Chew-Yi (2012) investigated the influence of balanced scorecard implemented by Taiwan LED-listed companies on the accumulation of the intellectual capital with organizational commitment as an interference variable, management of human resource, finance, production and marketing departments and staff of production departments as research subjects. The findings shows that balanced scorecard implemented by Taiwan LED-listed companies have significant influence on intellectual capital.

Malgwi and Dahiru (2014) examined balanced scorecard as a performance tool for evaluating business organizations holistically. It adopts the four perspectives of the BSC namely financial, customer, internal business process, learning and growth. Secondary sources of data were used for the study. The study result shows that BSC model has numerous benefits despite some limitations.

Safdar, Hazoor, Toheed and Ammara (2013) studied the impact of firms characteristics on stock value of non-financial listed companies in Pakistan. Data of 307 non-financial companies listed on the Karachi Stock

Exchange (KSE) were collected from the B-Recorder and Basic Balance Sheet Analysis (BBA) issued by the State Bank of Pakistan for the period 2000 to 2012. Market Capitalization (MC), Sales Growth (SG), Earnings Per shares (EPS) were the independent variables while stock price was the dependent variable. The MC and SG (independent variables) were used as proxies for firm size. Correlation matrix, multiple regression analysis, unit root test and granger causality were applied for analyses of data. Results revealed that MC and EPS had positive significant impact while sales growth had positive insignificant impact on firm value.

Abdulkadir and Gichinga (2016) examined the effect of customer care on organizational performance. The research employed quantitative research with descriptive design. The population of the study was telecommunication companies located in Mogadishu; purposive sampling techniques were adopted for the study. Data were analyzed using SPSS version 22. The result shows that service quality, customer satisfaction, customer relationship management and customer service delivery have significant and positive effects on organizational performance, Stepwise regressions revealed that customer care is determinants of organizational performance including service quality, customer satisfaction, customer relationship management, customer service delivery explained statistically significant portion of the variance associated with the extent of organizational performance of the telecommunication companies in Mogadishu-Somalia. The study recommended that there is need for the telecommunication companies in Mogadishu to increase their customer service delivery, service quality, customer satisfaction and customer relationship management as it was founded that these variables positively affect organizational performance of telecommunication companies in Mogadishu.

Kollberg and Elg (2010), attempted to identify the major characteristics of the BSC application in health care organizations in Sweden. The authors used a case study approach where they focused on different managerial levels in a hierarchical branch in three health care organizations that used the BSC. The analysis revealed that the BSC is used as a tool for enhancing internal capabilities and organizational development.

Fitria and Hanny (2019) investigated on the influence of non financial perspective of Balance Scorecard, customer perspective, internal business processes and learning and growth, on the financial perspective in banking institutions. The customer perspective, internal business processes, and learning and growth. The study used secondary data with purposive sampling data collection techniques. The sample used in this study was 43 companies that listed in stock exchange indonesia period from 2013 to 2017. The analysis technique used is panel data regression. The findings of the study shows that the customer perspective and internal business process perspective had a positive effect on the financial perspective proxied by the debt to equity ratio, profit margin and return on assets, customer perspective and the internal business process perspective had no positive effect on the financial perspective which is proxy by the current ratio; learning and growth perspective does not have a positive effect on the financial perspective that is proxied by the current ratio, debt to equity ratio, profit margin and return on assets.

Suchanek and Kralova (2015) examined on the effect of customer satisfaction on performance of food industry in Czech Republic. A model was constructed to explain what specific factors (affecting customer satisfaction) have an impact on the performance of a company. This model can help management to better run the business and achieve higher performance. Non-parametric statistical methods and logistic regression analysis was analyzed. The result showed that customer satisfaction has significant relationship with performance of food industry in Czech Republic.

Gupta Maheshwari and Sharma (2018) examined internal business process perspective of balanced scorecard: driver to outshine in front of customers and shareholders (An empirical study on inter – bank and inter sector comparison of public and private sector banks in India). The study used secondary data gotten from 10 public sector banks and 10 private sector banks financial statement for the period of ten (10) 2007 to 2017. The study adopted simple regression for the analyses through non-parametric tests using

International Business Machine (IBM) statistical package for the social sciences (SPSS) 22 after creating a performance score scale for each measure selected under this perspective on the basis of performance. The result showed that there is significant difference among public sector banks and among private sector banks when an inter-bank comparison has been drawn and no significant difference has been found between public sector banks and private sector banks when an inter-sector comparison has been drawn. The study recommended that for banks to improve their performance from internal business perspective, bank should try to enhance their operational efficiency through cost efficient services, achieve proficiency in operational capabilities, distributional channel capacity. This will leads to improvement in customer satisfaction in banks thus leads to improved financial performance.

Wu, Tzeng and Chen (2009) evaluated the performance of banks based on Balanced Scorecard using Fuzzy multiple criteria decision making (MCDM) Approach and ranked the four BSC perspectives of Balanced Scorecard in the order of their relative importance i.e. Customer, Finance, learning and Growth and internal process using FAHP process. Customer satisfaction, return on assets, earning per share, customer retention rate and profit per customer were found as top five evaluation indexes. U bank, C Bank and S bank respectively were ranked on the basis of performance using MCDM analytical methods. The authors suggested that it is not necessary that one performance evaluation index fits to all so it should be tailored as per the organizations goals as well as individual goals and future research should include other analytical methods to investigate the causal relationship among performance evaluation indexes of the BSC.

GAP IN LITERATURE

The study seeks to investigate on non financial perspective of balanced scorecard and firm’s value of deposit money banks Nigeria spanning 2010 to 2020. Many of the reviewed empirical studies focused on banks as their area of study up to 2017 and their reviewed literatures adopted multiple regressions and Anova for analyses. This has necessitated the gap in literature which this study seeks to fill. Thus, this study will focus balanced scorecard and firm’s value and also disaggregated the non financial perspective of BSC. The study also employed panel data analyses to determine cause and effect of the selected variables spanning 2010 – 2020.

Research Design

Ex- post fac to research design was used to carry out this study due to the fact that the study measures the relationship between financial perspective of balanced scorecard and firm values of selected deposit money banks in Nigeria. This design is preferred when the goal is to establish cause and effects relationship usually using quantitative method. It is also useful in modeling positivist research paradigm where the study is assumed to be distinct from the researcher and the outcome of the research is free from bias and subjectivness.

Population and Sampling

The population of this study was all the deposit money banks quoted on the Nigerian Stock Exchange who have complete financial records on their websites or Nigerian Stock Exchange for the period of 2010 – 2020. The study employed judgmental sampling technique to select only the deposit money banks whose annual reports have all the required data for the study.

Sources and Method of Data Collection

This study depended on secondary sources for data collection. The data was obtained from the annual reports and accounts of deposit money banks in Nigeria Stock Exchange (NSE) for the period 2010 to 2020. Documentary source of data was used because of the nature of variables under study. Finally, stock prices data were obtained from Website of the Nigerian Stock Exchange.

METHOD OF DATA ANALYSIS

In analyzing the data, both inferential and descriptive statistics was adopted. Descriptive statistics was adopted to summarize the financial perspective of balanced scorecard data. The statistics included mean, median, minimum and maximum. Also, correlation matrix was used to explain the relationship between each of the disaggregated financial perspectives and firm value. Panel data regression was considered appropriate in view of the fact that it helps in establishing relationship as well as cause and effect between the variables. In order to determine the best choice of analysis, the study will follow three forms of regression; Standard Ordinary Least Square (OLS), Fixed Effect and Random Effect regression. All these methods have various assumptions and conditions that must be fulfilled in order to achieve efficient estimates. However, the best technique was decided by the Hausman Specification test (either fixed effect or random effect regression).

Model Specification and Variables Measurement

The study employs the Standard Ordinary Least Square (OLS) regression technique to analyses the relationship between firm value proxied with Tobin's Q and balanced scorecard (non financial perspective) proxied with Learning and growth (human capital), Internal business process (Operational efficiency) and customer satisfaction (revenue) . In order to achieve the objectives of this study and test of the hypotheses, a functional relationship in form of multiple linear regression model consisting of dependent and independent variables will be formulated. The study employed Tobin's Q as dependent variable which is regressed against the explanatory variables that comprises of Human capita, operational efficiency and customer satisfaction. The regression model is presented as follows;

The functional form of the model is:

Firm Value = *f* (HC, OE, CS)

(+) (+) (+)

The econometric model for the research is set explicitly as follows:

Firm Value = ß0 + ß1HC + ß2CE + ß3CS

Where;

ß0 = Constant

ß1 = HC = (Human capital for learning and growth)

ß2 = OP = (Operational efficiency for internal business process)

ß3 = CS = (Customer satisfaction)

ß4 = NPM = Net Profit Margin

µ = Error term

A Priori Expectations: The operators/signs in parentheses represent a priori expectations about the coefficients of the variable above it. The apriori expectation connotes that balance scorecard should have

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effect on firm value.

Decision Rule

The rule for the acceptance of hypothesis states that if the probability value (P-Value) is less than 0.5 ie 5%, it means that there is significant relationship between the dependent and independent variables. Therefore, the null hypothesis will be rejected and the study accepts the alternative. On the other hand, if the probability value is greater than 0.5 ie 5% the null hypothesis is accepted meaning that there is no significant relationship between the stated dependent and independent variables and the alternative will be rejected.

Data Presentation

This section deals with the results and analysis of the findings. The study contains two sections. The first section presents descriptive analysis on variables of the study; the second section; presents the results on fulfillments of the classical linear regression model (CLRM) assumptions of the panel data analysis; finally, the third section shows the results of regression analysis that constitute the main findings of this study.

Descriptive Statistics

Table 4.1 provides a summary of the descriptive statistics of the dependent and explanatory variables for the five deposit money bank in Nigeria from the year 2010 to 2020 with a total of 55 observations. The table shows the mean, minimum, maximum, standard deviation and number of observations of the dependent and explanatory variables.

Table 4.1 Descriptive statistics

Variables	Mean	St. Dev	Max	Min	Observation
Tobin Q	0.530031	0.336237	1.322219	-0.99140	55
Learning and Growth	6.8300691	1.161246	8.236621	4.378580	55
Customer Satisfaction	7.310250	1.063782	8.760685	1.063782	55
Internal Business Process	-0.360786	0.488624	0.611723	-1.39794	55

Source: – E-Views 9

Table 4.1 provides a summary of the descriptive statistics of the dependent and independent variables for the selected deposit money banks in Nigeria from the year 2010 to 2020 with a total of 55 observations. The table shows the mean, minimum, maximum, standard deviation and number of observations of the dependent and independent variables. The above table shows the average indicators of dependent and independent variables computed from the financial report and standard deviation that shows how much dispersion that exists from the average value. Brooks (2008) opines that high standard deviation indicates that data point are spread out over a large range of values while low standard deviation indicates that the data point tend to be close to the mean. The mean values of all the variables ranges from minimum of -0.36078 as measured by the ratio of operational efficiency maximum of 7.36078 customer satisfaction as measured by the ratio of internal business process. The maximum and minimum rate of firm value of selected deposit money banks in Nigeria are 0.3% and 8.7 respectively. Also the table shows that the mean value of the dependent variable Tobin's Q is 0.530 and therefore indicating that Tobin Q gives accurate strength of the selected banks by 53%.

With regards to the explanatory variables the learning and growth (human capital) and customers satisfaction plays important role in valuing the worth of the selected deposit money banks in Nigeria.

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However, if the components of the explanatory variables are examined individually, it is evident that customer satisfaction (7.31025) is more efficient in comparison to internal business process (-0.36078).

Correlation Analysis

Correlation analysis is used to analyse the association between dependent and explanatory variables. The result of correlation is presented below;

Table 4.2 Correlation Analysis

Variables	**LTQ**	**L & G**	**CS**	**IBP**
LTQ	1	0.1603563	0.0806857	0.2228005
L & G	0.1603563	1	0.7651122	0.25128068
CS	0.0890685	0.7651122	1	0.2563629
IBP	0.2228005	0.7651122	0.2563626	1

Source: – E-Views 9

The values of the correlation coefficient are usually between -1 and +1. Accoding to Gujarati (2004) A value of correlation coefficient of +1 show that the two variables are perfectly related positively; while correlation coefficient value of -1 indicates that two variables are perfectly related in a negative linear sense. Finally, correlation coefficient value of 0, indicates that there is no linear relationship between two variables. The findings of the table above show that there is a significant positive relationship between Tobin's Q and OPFF while human capital and customer satisfaction are negatively related to Tobin Q. All the explanatory variables are not positively correlated and which means that it can affect the value of the worth of the selected banks. As evaluation of firm value is positively associated with capital based, banks should attempt to enhance its human capital and improve in retention of customers. When non financial perspective of banks is solid, the firm will be sure of their future. The diagnostic statistic among the explanatory variables, human capital and customer satisfaction are significantly interrelated (7.3102 and 7.31) compared to other independent variables. The result suggests that firm value and some non financial perspective of balanced scorecard variable are not positively related. Finally, the result shows that increase 1% of OPFF increases the worth of the selected deposit money banks to 2% and 0.40 respectively. In general, the finding of correlation analysis shows the direction and degree of associations between variables.

Regression results analysis

E-views regression result is divided into three categories. The top panel gives details of data that are analyzed, the middle panel gives information about individual regression coefficient and probability value. The based provides summary statistics about the whole regression equation. The two most important numbers, "R-squared" (the reliability of the variable employed and the percent of the variance in the dependent variable) and "S.E. of regression." and the one that shows how far is the estimated standard deviation of the error term. "F-statistic" and "Prob (F-statistic)" come as a pair and are used to test the hypothesis know the level of contribution of of the explanatory variables to the study. The final summary statistic is the "Durbin-Watson," the classic test statistic for serial correlation. A Durbin-Watson close to 2.0 is consistent with no serial correlation, while a number closer to 0 means there probably is serial correlation Brooks, (2008) which gives room for robustness test.

Choosing Random effect (RE) Vs fixed effect (FE) models

The results carried out indicate that all classical linear regression model (CRLM) assumptions are

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considered, so the ordinary least square regression can be applied for testing of hypothesis and decision making. However, since this study applied panel data, there are two types of panel estimator approaches that can be adopted, namely: fixed effects models (FEM) and random effects models (REM) Brooks, (2008). The simplest types of fixed effects models allow the intercept in the regression model to differ cross-sectionally but not over time, while all of the slope estimates are fixed both cross-sectionally and over time. The random effects approach proposes different intercept terms for individual variables and again these intercepts are constant over time, with the relationships between the explanatory and dependent variables assumed to be the same both cross-sectionally and temporally Brooks, (2008). To determine the acceptability of the panel data for statistical regression analysis, Hausman test was carried out on the collected data. This test helps to ascertain which model is appropriate whether random or fixed effect. So the model states if the p-value is greater than 0.05 random effects would be chosen and if the p-value is less than 0.05 fixed affect will be chosen.

The Hausman test hypothesis is

H0= Random effect model is appropriate

H1= Fixed effect model is appropriate

Pool Regression Analysis

Table 4.3 Regression results

Dependent Variable: LTQ				
Method: Pooled Least Squares				
Date: 11/16/22 Time: 15:36				
Sample: 1 55				
Included observations: 55				
Cross-sections included: 5				
Total pool (balanced) observations: 275				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.213554	0.140040	1.524949	0.1284
LHUMAN	-0.061025	0.026468	-2.305605	0.0219
LOE	0.140307	0.041903	3.348351	0.0009
LCS	0.041988	0.028933	1.451203	0.1479
R-squared	0.608506	Mean dependent var		0.053031
Adjusted R-squared	0.580195	S.D. dependent var		0.333774
S.E. of regression	0.323917	Akaike info criterion		0.597777
Sum squared resid	28.43385	Schwarz criterion		0.650385
Log likelihood	-78.19437	Hannan-Quinn criter.		0.618890
F-statistic	6.643533	Durbin-Watson stat		1.891170
Prob(F-statistic)	0.000241			

Table 4.3 above explains the results for the pooled regression result. This result be subjected to Hausman test in order validate the reliability and accuracy of the study.

Hausman Test

Table 4.4 Hausman Test

Correlated Random Effects – Hausman Test			
Pool: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	3	1.0000

Source: E-view 9

The value of probability is 1.0000 which is greater than 0.05 which indicates that findings of random effect model are acceptable for the decision making. Therefore the study concluded that random model is appropriate for decision making.

Table 4.5 Random effect regression results

Cross-section random effects test equation:				
Dependent Variable: LTQ				
Method: Panel Least Squares				
Date: 11/16/22 Time: 15:40				
Sample: 1 55				
Included observations: 55				
Cross-sections included: 5				
Total pool (balanced) observations: 275				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.213554	0.141085	1.513653	0.1313
LHUMAN	-0.061025	0.026666	-2.288526	0.0229
LOE	0.140307	0.042216	3.323548	0.0010
LCS	0.041988	0.029149	1.440453	0.1509
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.685060	Mean dependent var		0.053031
Adjusted R-squared	0.570850	S.D. dependent var		0.333774
S.E. of regression	0.326334	Akaike info criterion		0.626868
Sum squared resid	28.43385	Schwarz criterion		0.732083
Log likelihood	-78.19437	Hannan-Quinn criter.		0.669094
F-statistic	2.805203	Durbin-Watson stat		1.891170
Prob(F-statistic)	0.000508			

Source: – EViews output

Tobin Q = 0.213554 + -0.061025*HC + 0.140307*OE +0.0.041988*CS

Interpretations on regression results

The result shows that the R-squared and adjusted R-squared values are 0.68 and 0.57 respectively is an indication that the model is good. The result shows more than 57% of variations in firm value indicator i.e. Tobin Q of selected deposit money banks in Nigeria were explained by explanatory variables included in the model. However, the remaining 43% changes are caused by other factors that are not captured in the study. Furthermore, the F-statistic was 2.8052 and the probability of 0.0005 which shows that there is statistically significant relationship existing between the dependent variable (Tobin Q) and the independent variables, is 0.05 indicates that the overall model is significant at 1% and hence all the independent variables jointly are significant in causing variation in firm value of selected Deposit money banks in Nigeria. The panel random effect estimation regression finding shows that, coefficient intercept (α) is 0.2135. This means,when all explanatory variables took a value of zero, the average value Tobin Q would be 0.2135.

Test of the Hypothesis

Ho_1 Learning and Growth has no significant effect on firms' value

As shown in the regression output presented in table 4.3, the coefficient of learning and growth as measured by personnel cost -0.61025 and its corresponding P-value is 0.0229. Meaning that holding other independent variables fixed at their average value, when learning and growth increase by one unit, deposit money banks in Nigeria the worth of firm also increase. Therefore, the study accepted that there is a significant relationship between the learning and growth and firm value of deposit money banks in Nigeria. This finding is similar to the finding of Okoye, Odum and Odum (2016). The relationship between learning and growth and firm value is positive. This result shows that learning and growth is significantly related to firm value. Therefore management banks are advised to invest on human capital.

Ho2 Internal business process has no significant effect on firms' value

As shown in the regression output presented in table 4.3, the coefficient of internal business process as measured by operational efficiency 0.140307 and its corresponding P-value is 0.0010. Meaning that holding other independent variables fixed at their average value, when internal business process increase by one unit, deposit money banks in Nigeria the worth of firm also increase. Therefore, the study accepted that there is a significant relationship between the internal business process and firm value of deposit money banks in Nigeria. This finding is similar to the finding of Okoye, Odum and Odum (2016). The outcome shows that there is a positive and significant relationship between internal business process.

Ho_3: There is no significant relationship between Customer Satisfaction and Firm Value

The result of customer satisfaction denoted by random effect revealed that the coefficient is 0.041988 with a probability value of 0.1509 which less high than the significance level of 0.05. This result revealed that customer satisfaction positively impact on the firm value and do not have significantly effect on firm value of selected deposit money banks in Nigeria. Therefore, we accepted the null hypothesis that states customer satisfaction has significant relationship with firm value of selected deposit money banks in Nigeria.

SUMMARY

The study was designed to investigate empirically, the effect of financial perspective of balanced scorecard on firm value of selected deposit money bank in Nigeria for the period of 2010 – 2022. In a bid to achieve the objectives of this study, many related literature were reviewed in accordance with the acceptable norms of three segments; conceptual, theoretical and empirical. Based on previous work reviewed, gap was identified, which gave rise to this study and justified the purpose of the study.

On the research methodology, the study employed ex-post facto research design which is an investigation that starts after the fact has been known. It is also used to test the cause and effect relationship of a study. The analysis was done in three forms, namely descriptive, robustness test (multicollinearity; correlation and Huesman test) and panel regression analysis. The descriptive analysis examined the minimum, maximum, mean and standard deviation. The empirical analysis examined the effect of financial perspective of balanced scorecard on firm value of selected deposit money bank in Nigeria. The following findings were made;

The first analysis was descriptive statistic that helps to ascertain the mean, minimum, maximum and standard deviation of the study. Secondly, correlation analysis was also carried to determine the level of correlation between dependent and independent variables of the study. Finally, the panel analysis was employed to test the hypotheses of the dependent and independent variables.

The findings of the study revealed as follows; from non financial perspective; learning and growth has negative and significant effect on firm value with a coefficient value of -0.61025 and probability value of 0.0229. Operational efficiency has positive and significant effect on firm value with coefficient value of 0.140307 and probability value of 0.0010. Customer satisfaction has positive and insignificant effect on firm value with coefficient value of 0.041988 and probability value of 0.1509. This result is in agreement with Okoye, Odum and Odum 2016 assertion that learning and growth is one of the variables that contributed the worth of firms.

CONCLUSION

This study provides empirical evidence by examining the relationship between non financial perspective and firm value of deposit money banks in Nigeria. The findings of the study show the following;

1. The focus of the present study is to examine the effect of non financial perspective and firm value on selected deposit money banks in Nigeria.
2. To address the stated objectives above, all the quoted banks have been considered as a core population. But five banks were selected for the study which has data for the targeted time of the study.
3. The findings show that dependent variable which was considered as firm value was proxy to Tobin Q while financial perspective is considered as independent variable which is proxy with non financial perspective are learning and growth, customer perspective and internal business process.
4. The result shows positive and significant relationship between non financial perspective of balanced scorecard and firm value of selected deposit money banks in Nigeria and among the components of non financial items internal business process is found to be the most influential value drivers in the industry.
5. The study concluded that banking sectors should pay attention to the non financial items due to their contributions in gaining investor confidence.
6. The effect of non financial perspective of balanced scorecard on firm's value final findings presented very significant facts. The result shows that the key explanatory variables have significant and positive on firm value (Tobin Q). Therefore, the study concluded that non financial perspective gives picture of the financial strength and ensure healthy future existence.
7. Various panel regression models are fit for the final decision making based on the presented facts of f-statistics. However, the application of hausman test has explained that random effect model with the key findings is very much acceptable. The value of P-Value is significant at 5% level which explains

the difference in the coefficient for both fixed and random effect, so the study used random model effect for decision.

RECOMMENDATIONS

Based on the findings and conclusion, the study therefore recommends that;

1. Investors should strictly analyze the non financial perspective to understand the items that drives the firm.
2. Banking industry should create awareness of the importance of non financial perspective of balanced scorecard in firm evaluation and its competitive advantage.
3. Assessment of value of firms should be holistic in the sense that financial and non financial items should be strictly considered.
4. Banks are advised to review their strategies in other with the present technological advancement.
5. Since customer satisfaction impact firm value, so it is important for banking sector to map out strategies to gain their customer loyalty.
6. The world is moving into digital and advanced technology, the study suggests that banking sector should follow suit by training and retraining their personnel.

REFERENCES

1. Abdulkadir A. and Gichinga L. (2016). Effect of customer care on organizational performance of telecommunication companies in Mogadisho -Somalia Journal of Business Management ISSN-2455-6661
2. Adeyemi, S.B. and Oboh C. S 2011. Perceived Relationship Between Corporate Capital Structure and Firm Value in Nigeria", International Journal of Business and Social Science, 2(19).
3. Ajibolade S. and Oyewo B. (2017) Firm characteristics and performance disclosure in annual reports of Nigerian banks using the balanced scorecard" Euro Economic, Issues 1(36) ISSn 1582- 8859.
4. Alshammari A. (2012) "The evaluation of the impact of using balanced scorecard on strategic performance in small and medium enterprise: Galway – Mayo University technology.
5. Al-Najjar, B.,and Elgammal, M. M. (2013). Innovation and credit ratings, does it matter? UK evidence. Applied Economics Letters, 20(5), 428-431.
6. Al-Najjar S.M. and Kalaf K.H. (2012) Designing a balanced scorecard to measure a bank's performance, A case study. International Journal of Business Administration vol.3 (4) Retrieved via www.google.com on 23/8/2013.
7. Anand M, Sahay B.S, Saha S (2005). Balanced Score Card in Indian Companies, Vikalpa, 30(2):1-15.
8. Aranda, C. & Arellano, J. (2010). Consensus and link structure in strategic performance measurement systems: a field study. Journal of Management Accounting Research, 22(1), 271-299.
9. Baiman, S. and Baldenius, T. (2009). Nonfinancial performance measures as coordination devices. The Accounting Review, 84(2), 299-330.
10. Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. Journal of Management, 27(6), 643-650.
11. Baroma, B., Bellisario, A., Chirico, A., Appolloni (2013). "A Breakthroughs in the Management Accounting Science: Imaging a Balanced Scorecard. Thought by Lean Philosophy RationalesTransit Stud Rev 20", pp. 239-251
12. Beck T. Levine R., Loayza N. (2000). finance and the sources of growth. Journal of financial economic 58 (1-2) 261 – 300.
13. Barontini and Caprio. (2006). The effect of family control on firm value and performance. Evidence from Continental Europe. Accessed through website: http://www.familyfirms.ch/Papers/Paper_1_1.pdf. Oktober 2011.
14. Brigham, E. F., & Houston, J. F. (2010). Fundamentals of financial management (11th ed.). Jakarta:

Salemba Empat.

15. Bryant, L., Jones, D. A., & Widener, S. K. (2004). Managing value creation within the firm: an examination of multiple performance measures. Journal of Management Accounting Research, 16(1), 107-131.
16. Burns J., Hopper T., and Yazdifar A. (2004). management accounting education and training: putting management in and taking accounting out qualitative. research in accounting and management 1 (1) 66 – 84.
17. Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital, International Journal of Management Reviews, 3(1),41-60.
18. Brooks, C. (2008). Introductory Econometrics for Finance (2nd ed.). New York: Cambridge University Press.
19. Citra L., Abdul. L. and Suharto (2020) Effect of Debt to Equity Ratio and Return on Assets on Earnings per Share with Firm Value as a Moderating Variable in Various Industrial Sub-Sector Manufacturing Companies Indonesia. Asian Business Research Journal, Vol. 5, 39-47.
20. Corbett, C. J., Montes-Sancho, M. J., & Kirsch, D. A. (2005). The financial impact of ISO 9000 certification in the United States: An empirical analysis. Manage Science, (51), 1046-1056.
21. Chen, M., Cheng, S. and Hwang, Y. (2005), An empirical investigation of the relationship between intellectual capital and firm's market value and financial performance. Journal of Intellectual Capital, Vol. 6 No. 2, pp. 159-76.
22. Dahou K. and Hacini J. (2018). Effect of human capital management on firm performance via balanced scorecard. management and economic review vol. 3 ISSN 1.
23. Dedi, K. Rani. R. and Yusuf, A (2018) Analysis of the effect of net profit margin, price to book value and debt to equity ratio on stock return in Indonesia. International journal of recent scientific research vol 9, issue, 7(f), pp 28091 – 280985.
24. Emmanuel C. and Otley D. (1995). Reading in accounting for management control. London, Chapman and hall.
25. Etim R.S. and Agara I.G. (2011), The balanced scorecard: The new performance management paradigm for Nigerian firms. International. Journal of economic development research and investment vol.2 (No.3).
26. Evans, N. (2005) "Assessing the balanced scorecard as a management tool for hotels". Contemporary Hospitality Management. 17(5). pp. 3 7 6 -3 9 0
27. Fornell, C., Mithas, S., Morgeson III, F. V., & Krishnan, M. S. (2006). Customer Satisfaction andStock Prices: High Returns and Low Risk. Journal of Marketing, 70 (January), 1-14.
28. Fakhri, G., Menacere, K., and Pegum, R. (2011). Organizational Specificities that affect the Use of Corporate Performance Measurements Process in the Banking Sector. Journal of Performance Management. 3(23), 5-23.
29. Farooq, A., Hussain, Z. (2011). "Balanced scorecard perspective on change and performance: astudy of selected Indian companies", Procedia Social and Behavioral Sciences, No. 24(1), pp. 754-768
30. Fitria A. and Hanny O., (2019) The Effect of Non Financial Perspective Toward Financial Perspective of Balance Scorecard In Banking Companies Listed In Indonesia Stock Exchange. Advances in Social Science, Education and Humanities Research, volume 377.
31. Hall L. & Bagchi-Sen S. (2002). A study of R&D, innovation, and business performance in the Canadian biotechnology industry. Technovation, 22(4), 231-244.
32. Ibrahim, M. (2015). Investigating the use of the four perspectives of the balanced scorecard as a technique for assessingperformance by Nigerian Banks. Journal of Accounting and Taxation, 7(4), pp. 62-70.
33. Ghalayini A. M. and Noble J.S. (1996) "the changing bsis of performance measurement. International journal of operations and productions management 16 (8) 63-80.
34. Grant, R. M. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal, 17(S2), 109-122.
35. Grant, R. M. (2002). The knowledge-based view of the firm. The strategic management of intellectual

capital and organizational knowledge, 133-148, New York, NY: Oxford University Press.

36. Gupta A.K., Maheshwari M. and Sharma S. (2018) "performance evaluation using balanced scorecard model in banking industry: A case study of HDFC bank. Pacific business review international vol.10 ISS. 9.
37. Gupta A. K. Maheshwari M. and Sharma S. (2020) internal business process perspective of balanced scorecard: driver to outshine in front of customers and shareholders (An empirical study on inter – bank and inter sector comparison of public and private sector banks in India).. Journal of Critical Reviews ISSN- 2394-5125 Vol 7, Issue 13, 2020
38. Hamdy A. (2018) "Balanced scorecard role in competitive advantage of Egyptian banking sectors. The business and management review vol. 9 number 3.
39. Hamid K.T. (2008). An assessment of the relationship between corporate governance and internal control system in the banking industry. An unpublished Ph.D thesis submitted to the Department of Accountancy Bayero University Kano, Nigeria.
40. Haslinda A. (2009). Eevolving terms of human resource management and development. The journal of international social research 2 (9) 180 – 186.
41. Harold, L. (2006), Performance Measurement and Management of Technology in Indian Banking: New Approaches. Contributors, I, Bank net India, (5), pp.6-18.
42. Horngren, C.T.; Datar, S.M. and Foster, G. (2006). Cost Accounting: A managerial emphasis. New Jersey: Pearson Education Inc.
43. Ishtiaque, A. A., Khan, H., Akter, S. and Fatima, Z. K. (2007): Perception Analysis of Balanced Scorecard: An Application over a Multinational Corporation of Bangladesh, Journal of Business Studies, Vol. 28, No. 2, pp. 238-268.
44. Kaplan, R.S. and Norton, D.P. (1992). The Balanced Scorecard – Measures that Drive Performance. Harvard Business Review, 70(1), 71- 79.
45. Kaplan, R. S., & Norton, D. P. (1996). Linking the balanced scorecard to strategy. Carlifornia Management Review, 39(1), 53-79.
46. Kaplan, R. S., & Norton, D. P. (2001a). The strategy focused organization: how balanced scorecard companies thrive in the new business environment. Boston, MA: Harvard Business School Press.
47. Kaplan, R. S., & Norton, D. P. (2004). The strategy map: guide to aligning intangible assets. Strategy & Leadership, 32(5), 10-17.
48. Kunle E. N. (2015). Exploration use of BSC as techniques doe assessing performance in the Nigerian banking industry. Global journal of accounting economic and finance Vol 2(3) Pp. 030-038.
49. Kollberg, B., and Elg, M. (2010). The Practice of the Balanced Scorecard in Health Care Services. International. Journal of Productivity and Performance Management, Vol. 5 No. 60, pp. 427-445
50. Lev, B. (2001). Intangibles—Management, Measurement, and Reporting. Washington D.C: Brookings Institution Press.
51. Ndubisi, E. C. and Nwankwo, C. A. (2019) Customer Satisfaction and Organizational Performance of the Nigerian Banking Sub-Sector International Journal of Business and Management Invention (IJBMI) ISSN (Online): 2319.
52. Niven, P.R. (2012). Balanced scorecard step-by-step: maximizing performance and maintaining results. . New York, NY: John Wiley & Sons.
53. Norreklit, H. (2000). The balance on the balanced scorecard a critical analysis of some of its assumptions. Management Accounting Research, 11(1), 65-88.
54. Morgan, N., Anderson, E. and Mittal, V. (2005). Understanding Firms' Customer Satisfaction Information Usage. Journal of Marketing, 69 (August), 131–151.
55. Mohammed M., Yusheng K., and Isaac A. M. (2019) 'Exploring the Link between Operational Efficiency and Firms' Financial Performance: An Empirical Evidence from the Ghana Stock Exchange (GSE). International Journal of Trend in Scientific Research and Development (IJTSRD). Volume: 3, Issue: 4 ,vailable Online: www.ijtsrd.com e-ISSN: 2456 – 6470
56. Mohammed I (2015) "Investigating the use of four perspectives of balanced scorecard (BSC) as techniques for assessing performance by Nigerian banks" Journal of accounting and taxation Vol.7(4)

ISSN 2141-6664.

57. Okoye E. I., Odum and Odum (2017). Effect of balanced scorecard of firm value; the case of quoted manufacturing companies in Nigeria. The international conference on African entrepreneurship and innovation for sustainable development80386
58. Punnyamoorthy M., and Murali R. (2008). Balanced scorecard for the balanced scorecard a benchmarking tool. An international Journal Emerald group publishing Limited 15 (4) 420 – 443. Http://idoi.org/10.1108/14635770810887230.
59. Pritpal S. and BhullarD. T. (2019) impact of operating efficiency on firm value – a case of Indian banking sector and information technology sector. International. Journal of Business and Globalization Vol.23 No 3.
60. Peter C. (2014)' Developing Objectives for the Internal Business Process Perspective. https://erpminsights.com/developing-objectives-for-the-internal-business-process-perspective/
61. Pandey, I. M. (2007). Financial management (9th ed.). New Delhi: Vikas Publishing House Ltd.
62. Sullivan D.O' (2013). Customer satisfaction, earning and firm value. published by Emerald group publishing Limited European Journal of marketing Vol 46 Issue 6 pp 827 – 843
63. Suchanek P. and Kralova M. (2015). Effect of Customer Satisfaction on Company Performance. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 63(3): 1013–1021. https://www.researchgate.net/publication/281314808..
64. Sun, K. A. & Kim, D. Y. (2011). Customer satisfaction, profitability, and firm value in the hospitality and tourism industry: An application of American customer satisfaction index (ACSI). scholarworks.umass.edu/…/viewcontent.cgi?…hos.
65. Tapanya, S. (2004). Examining the Factors which Influence Performance Measurement Management in the Thai Banking Industry: An Application of the Balanced Scorecard Framework. PhD. Thesis, Murdoch University.
66. Tuan, T. T. (2019) The Impact of Balanced Scorecard on Performance: The Case of Vietnamese Commercial Banks. The Journal of Asian Finance, Economics and Business. Volume 7 Issue 1
67. Wolfe J. and Sauaia A. C. A. (2003). The Tobin's Q as a company performance indicator. Development in Business simulation and experiential learning Vol. 3
68. Wu, H.Y., Tzeng, G. H. & Chen, Y.H. (2009). A Fuzzy MCDM Approach for Evaluating Banking Performance Based on Balanced Scorecard. Expert Systems with Applications. 36(6). 10135-10147.
69. Wu, I.L., Chang, C.H. (2012). Using the balanced scorecard in assessing the performance of e-SCM diffusion: A multi-stage perspective, Decision Support Systems, No. 52(1), pp. 474-485
70. Taylor, W. B. (2010). The balanced scorecard as a strategy-evaluation tool: The effects of implementation involvement and a causal-chain focus. The Accounting Review, 85(3), 1095-1117.
71. Zhang, Y. and Li, L. (2009). Study on Balanced Scorecard of Commercial Bank in Performance Management System. Proceedings of the 2009 International Symposium on Web Information Systems and Applications (WISA'09) Nanchang, P. R. China, May 22-24, 206-209.https://blog.datumize.com/benefits-business-process-analysis-what-when-how-why
72. Zulnaidi Y. (2014) investigated on the direct and indirect effects of customers focus on performance in public firms International Journal for Quality Research 8(2) 265–276 ISSN 1800-6450.