



# INTELLECTUAL CAPITAL AND FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

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## ABSTRACT

*The paper seeks to investigate the effect of intellectual capital on the financial performance of deposit money banks in Nigeria. Managing intellectual capital will help deposit money banks enhance their financial performance via increased return on assets, return on equity and return on sales. Intellectual capital increases the market value of organizations, improves better communication, optimizes utilization of potentials, increases value creation ability, and better image, enhances customer satisfaction, motivates employees, and indeed enhances most business processes. Intellectual capital theory and knowledge-based theory were adopted as baseline theories for the study as they emphasize the importance of using the human ability to create new business processes which result in better services for consumers and ensure improved financial performance of the organization. The paper concludes that there is a positive relationship between intellectual capital and the financial performance of deposit money banks in Nigeria, thus intellectual capital should be recognized as an important business resource.*

## INTRODUCTION

Financial performance is the measurement of the results of an economic entity's policies and operations in monetary terms to determine its overall financial health over a given time frame (Gaspardo, 2004). The financial performance is normally announced through periodic financial statements and it is targeted at producing complete and reliable information to assist the users in take an informed investment decision. Financial Performance is crucial to organizational survival and continues patronage by the stakeholders. Financial performance is a natural result of business operations involving the use of both physical capital and intellectual capital. The ownership of intangible assets especially intellectual capital has become more important in this modern era where technology and knowledge have significant roles in company operating activities, (Ofurum & Aliyu, 2018)

Over the past two decades, there's been a transition from an industry-based environment to a high-technology innovation-based environment that focuses on expertise, creativity, skills, and dedication of organizational members and this forms the intellectual capital of such an organization. In the industry-based environment, the physical assets like plants, machinery, materials, equipment, etc., were of utmost importance and made up the bulk of the organization's assets and value, while in the latter- knowledge, ability, skills, experience, and attitude of workers, assume greater significance, (Madumere & Ubani, 2022). Rapid technological advancement has altered organizational systems as the new systems are mainly driven by technology, knowledge, expertise, relations with stakeholders, etc., which may be collectively described as Intellectual Capital (Ahangar, 2011). In recent times, intangible or intellectual assets have been recognized as the prominent resource needed for organizational survival and growth. Companies that provide services such as software programming, financials,

pharmaceutical; banking, hoteling, hospitality, consulting, accounting, legal, educational services, etc. depend to a considerable extent on their intellectual capital for earning revenues.

Though organizations and governments have begun to see that intellectual capital is a critical factor in generating a sustainable competitive advantage in recent years, intellectual capital has not been widely explored (Pedrini, 2007). The global economy has brought focus to the regional aspects of economic growth and has changed the perspective of economic growth from production (output) aspects to the resource (input) aspects, as production has become more knowledge-based (Rodriguez & Martí, 2006). In developing economies, intellectual capital components can function as pillars that support economic growth and additional efforts to increase intellectual capital levels affect the economy positively, (Stähle & Bounfour, 2008). The banking sector, according to Kamath, (2010) is an ideal area for intellectual capital research because the sector is "intellectually" intensive as compared to other sectors thus this paper examines the impact of intellectual capital on the financial performance of deposit money banks

## INTELLECTUAL CAPITAL

Stewart, (2020) defines intellectual capital as the total stocks of collective knowledge, information, technologies, intellectual property rights, experience, organizational learning and competence, team communication systems, customer relations, and brands that can create value for a firm. Similarly, intellectual capital is seen as the group of knowledge assets that are attributed to an organization and most significantly contribute to an improved competitive position of this organization by adding value to defined stakeholders. Roos & Roos, (2021) define intellectual capital as the hidden assets of the company not fully captured on the statement of financial



position; while Chokri & Zehri, (2012) defines it as the intangibles such as patents, intellectual property rights, copyrights, and franchises. (Isanzua, 2015, Fatima & Ousama, 2015; Poh, 2018) defined intellectual capital as a residual being the difference between the book value of the firm and its market value. The limitations on financial statements in explaining firm value underline the fact that the source of economic value is no longer the production of material goods, but the creation of intellectual capital (Chen, Cheng, & Hwang, 2005).

Intellectual capital includes human capital and structural capital wrapped up in customers, processes, databases, brands, and systems; and has been playing an increasingly important role in creating corporate sustainable competitive advantages (Kaplan & Norton, 2004). Among Intangible assets especially Knowledge is gaining more prominence than ever before as a matter of survival and of achieving competitive advantage (Latif, Malik, & Aslam, 2012), as new skills and technology will continue to be successful and intellectual capital has become a critical driver for sustainability. Intellectual capital cannot be complete without adjoining human capital, relational capital, and structural capital components; (Al-Musali & Ismail, 2014). According to Chokri & Zehri, (2012), intellectual capital from a managerial perspective can be defined as the knowledge, applied experience, organizational technology, relationships, and professional skills that provide a competitive edge in the market. Intellectual capital is knowledge that can be converted into value or profit. It is the value embedded in the ideas embodied in people, processes, and customers.

## FINANCIAL PERFORMANCE

Financial performance is a measure of how much a company's ability to create profit, profit, or revenue. How to measure the company's financial performance in creating profits, especially companies in the financial industry such as Banking. This can be viewed from the financial statements. The financial statements consist of; (a) a Balance Sheet, (b) Income, (c) Cash flow, (d) Changes in the capital, (Fatihudin & Mochklas, 2018). Financial performance is the company's financial condition over a certain period that includes the collection and use of funds measured by several indicators of capital adequacy ratio, liquidity, leverage, solvency, and profitability. Financial performance is the company's ability to manage and control its resources (Poongavanam, Mohammed, & Rengamani, 2017). Firm financial performance is used as a tool to measure an organization's current development and potential growth. Although there are many indicators estimating financial performance, the choice of appropriate ratios depends on the characteristics of studied objects and study purposes. Return on equity and return on sales are two of the most used ratios to measure financial performance, (Nhung, Huyen, & Daphne, 2021). Waddock and Graves (1997) used return on asset, return on equity, and return on sales to measure the company's financial performance, whereas Rufet al. (2001) used return on equity, return on sales and growth in sales in the study of the determinants of financial performance. Margarita, (2004) has measured financial performance based on return on asset, return on equity, and return on sales to study the relationship between social responsibility and corporate financial performance. Mara

& Nicoleta, (2019) used return on equity to evaluate the financial performance of studied companies. Many researchers agree that the use of those financial ratios gives them valuable information on a firm financial performance. While return on equity shows the efficiency of equity, return on sales reflects the effectiveness of the company's cost management. In other words, one ratio refers to the capacity to use capital (input of capital), and the other refers to the ability to manage the operating cost (output of capital).

## INTELLECTUAL CAPITAL AND FINANCIAL PERFORMANCE

Meressa, (2016) examined the relationship between intellectual capital and firm performance in Iran using Pulic's model. In this model, the value-added intellectual coefficient is used to evaluate firms' intellectual capital. Also, the relationship between intellectual capital and firms' market value is examined. In addition to intellectual capital, the relationship between the components of intellectual capital that is, human and structural capital and performance is also investigated. The empirical data is collected from 100 firms listed on Tehran Stock Exchange (TSE) during the period 2000-2006. The results support the hypothesis that human and intellectual capital is positively related to performance (Tobin's Q), and intellectual capital can be taken into consideration for improving the performance of Iranian firms. Also, the value-added intellectual coefficient proves to be an effective tool that can be used by current decision-makers in Iran's capital market. Thus, intellectual capital is the main source of value creation in the modern economy.

On the other hand, Kurfi, (2017) investigated the impact of intellectual capital on the financial performance of listed Nigerian deposit money banks from 2010 to 2014 by adopting the VAIC model. The Regression results show that there was a positive significant influence of IC on financial performance. Specifically, the results showed that structural capital and capital employed influence the financial performance of Nigerian food products deposit money banks. Based on the resource-based theory, the results prove that deposit money banks can enhance financial performance by emphasizing intellectual capital. Additionally, Ogbodo, (2012), examined the effect of intellectual capital on the financial performance of 15 quoted commercial banks in Nigeria using the VAIC model through a panel data analysis for six years from 2010 to 2015. The results revealed that there is a positive and statistically significant relationship between Intellectual Capital and the financial performance of deposit money banks in Nigeria at a 5% level of significance.

Empirical findings show that human, social, and customer capital have a positive and direct effect on product, process, and organizational innovation which results in increased financial performance. Human capital has a significant impact on banks' performance directly and indirectly. These findings suggest that the development of effective techniques of knowledge management, enabling banks to accumulate the intellectual capital necessary to adapt to a constantly changing



environment, represents an effective tool for achieving the goals of both bank managers and policymakers.

### INTELLECTUAL CAPITAL THEORY

The theory of intellectual capital is a prominent theory that has not only challenged large attention but already considerably promises an increase in business results in the future. The base of the theory lies in the fact that tangible assets (land, buildings, equipment, and money) of today's leading deposit money banks around the world have less value than intangible assets, which have not been quoted in their business balances. This hinges on the fact that: the wealth of an organization is based on human capital, structural capital, and consumer capital. Value creation happens when one kind of capital turns into another. The value has been created whenever the human ability (human capital) creates new business processes (structural capital) which result in better services for consumers and increase their loyalty (consumer capital) (Njuguna, 2014). In this study, the theory will help in elaborating intellectual capital and its role in organizational performance.

The intellectual capital theory is based on the premise that, in contemporary circumstances, intangible assets not disclosed in the balance sheet are very important for the firm's operations, since they can significantly increase the value of assets or the market value of the firm (Kolaković, 2003). This theory is based on the belief that the wealth of the firm depends on human, structural, and relational capital, and value is created by converting one form of capital into another form (Kolaković, 2003). A significant contribution to the development of the theory of intellectual capital gives Penrose in her "The theory of the growth of the firm" from 1959, in which she points out that the unique intangible intellectual resources and unique capabilities of the firm are the key determinants of business performance (Krstić, 2014). At the same time, she emphasizes the importance of management in using available internal resources, i.e. their experience and skills in converting resources into products that will meet the needs of the consumers, thus contributing to the exploitation of market opportunities.

### KNOWLEDGE-BASED THEORY

Originating from the strategic management literature, this perspective builds upon and extends the resource-based view of the firm initially promoted by Penrose (1959). The knowledge-based theory of the firm considers knowledge as the most significant resource of a firm Njuguna, (2014). Its proponents argue that because knowledge-based resources are usually difficult to imitate and socially complex, heterogeneous knowledge bases and capabilities among firms are the major determinants of sustained competitive advantage and superior corporate performance.

This knowledge is embedded and carried through multiple entities including organizational culture and identity, policies, routines, documents, systems, and employees Njuguna, (2014). Although the resource-based view of the firm recognizes the important role of knowledge in firms that achieve a competitive advantage, proponents of the knowledge-based view argue that

the resource-based perspective does not go far enough. Information technologies play an important role in the knowledge-based view of the firm in that information systems can be used to synthesize, enhance, and expedite large-scale intra- and inter-firm knowledge management (Alavi and Leidner 2001).

### CONCLUSION

Intellectual Capital is the knowledge-based equity of organizations and has attracted a significant amount of practical interest. There is now widespread acceptance of Intellectual Capital as a source of competitive advantage. Intellectual capital plays a significant role in value creation in today's economies and organizations, where organizations in knowledge-based economies have been depending on knowledge assets rather than tangible assets to enhance their performance. Intellectual capital is therefore knowledge that can be converted into profit by exploiting the non-financial and nonphysical resources of the company. Intellectual capital is one of the human capital assets that boost banks' efficiency and financial performance hence efficient intellectual capital would increase banks' financial performance.

Therefore, there is a need for deposit money banks in Nigeria to pay more attention to human and intellectual capital. A situation where human and intellectual capital is not being recognized in the financial statement is a huge anomaly given the critical role it plays in corporate performance. Intellectual capital plays a significant role in value creation in today's economies and organizations, where organizations in knowledge-based economies have been depending on knowledge assets rather than tangible assets to enhance their performance.

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