



BOARD DIVERSITY AND OPERATIONAL EFFICIENCY OF DEPOSIT MONEY BANKS IN BAYELSA STATE, NIGERIA

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ABSTRACT

This study investigated the relationship between board diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria. Board diversity was proxied by gender diversity, age diversity and professional diversity, while operational efficiency was treated as a single construct. The study was anchored on the Resource Dependence Theory and the Institutional Theory, and was guided by the positivist philosophy. A cross-sectional survey research design was adopted. The population of the study comprised 280 staff of the sixteen Deposit Money Bank branches in Yenagoa, Bayelsa State, from which a sample of 162 respondents was drawn using the Krejcie and Morgan sample size determination table, with the Bowley proportional allocation formula and the stratified random sampling technique deployed to distribute the sample across the banks. A structured five-point Likert-scaled questionnaire served as the instrument of data collection, and 140 correctly completed copies were used for the analysis. The hypotheses were tested with the Partial Least Squares-Structural Equation Modelling technique via SmartPLS 4.1.1.1 at a 0.05 level of significance. The findings revealed a weak positive but not significant relationship between gender diversity and operational efficiency; a strong positive and significant relationship between age diversity and operational efficiency; and a weak positive but not significant relationship between professional diversity and operational efficiency. The study concluded that age diversity is the dominant board diversity driver of operational efficiency among Deposit Money Banks in Bayelsa State, while gender and professional diversity do not, on their own, significantly improve internal operational processes. It was recommended, among others, that the management of Deposit Money Banks in Bayelsa State should deliberately constitute inter-generational boards that blend the operational wisdom of older directors with the technological fluency of younger directors, in order to optimise internal processes and sustain operational efficiency.

KEYWORDS: Board diversity, gender diversity, age diversity, professional diversity, operational efficiency, Deposit Money Banks, PLS-SEM, Bayelsa State, Nigeria.

1.1 INTRODUCTION

The banking industry occupies a central position in Nigeria's socio-economic architecture. Deposit Money Banks (DMBs) mobilise savings, create credit, facilitate payments, and drive financial inclusion efforts that extend banking services to unbanked populations in rural and semi-urban areas, including communities in Bayelsa State. The sector is also a major employer of labour and a significant contributor to national output, and the organisational health of DMBs is intrinsically linked to national economic performance, making bank performance a matter of public interest that goes beyond shareholder returns (Ugoani & Amu, 2020). These contributions are, however, juxtaposed against profound challenges. The industry remains highly susceptible to macroeconomic volatilities such as exchange rate fluctuations, inflationary pressures and volatile oil prices, while issues of insider lending, weak risk management practices and board inefficacy persist (Ehikioya, 2019). Additionally, banks face regulatory complexities, high operating costs and the persistent threat of non-performing loans, particularly within an environment characterised by a high rate of business failures, and these pressures have intensified under the Central Bank of Nigeria's ongoing recapitalisation reforms (Adeyemi & Oboh, 2021). It is against this backdrop that the operational efficiency of DMBs in Bayelsa State assumes strategic importance. Operational efficiency, in the banking context, denotes a bank's ability to maximise output in the form of services and revenue while minimising input in the form of costs and resources, and it is often gauged through metrics such as the cost-to-income ratio, turnaround time and the quality of internal processes (Ugoani & Amu, 2020). Operational efficiency matters for several reasons. First, it reflects the quality of internal processes and



management's adeptness at resource utilisation, thereby determining the bank's capacity to generate internal capital. Second, an operationally efficient bank can absorb shocks, maintain depositor confidence and remain competitive in a high-cost operating environment. Third, efficiency underpins a bank's ability to deliver high-quality, affordable services to customers, which is essential for retention and market share in a fiercely contested financial marketplace (Eze & Nweke, 2019). In an environment like Bayelsa State, where infrastructural deficits inflate the cost of doing business, operational efficiency becomes the primary determinant of whether a bank branch remains viable, and inefficient banks will struggle to generate the internal capital required to survive regulatory recapitalisation thresholds (Ugoani & Amu, 2020).

The literature has identified several antecedents of the operational efficiency of Deposit Money Banks. These include corporate governance structures, reflecting board size, composition, independence and the presence of sub-committees (Ehikioya, 2019); asset quality and credit risk management, since high non-performing loan burdens erode the efficiency of resource deployment (Ibrahim et al., 2023); management quality, denoting the expertise and strategic decisions of the executive team and board (Adegboyegun & Igbekoyi, 2022); the adoption of appropriate digital banking technologies, which compress transaction costs and processing time (Eze & Nweke, 2019); and organisational culture, which shapes how efficiently internal processes are executed (Adeyemi & Oboh, 2021). However, among these antecedents, this study adopts board diversity as the requisite predictor of the operational efficiency of Deposit Money Banks in Bayelsa State, because the board is the apex decision-making organ whose composition determines the quality of strategic oversight over all other efficiency drivers. Board diversity encapsulates the heterogeneity in board composition across demographic, experiential and cognitive attributes, and it is aimed at enriching decision-making through varied perspectives and reducing groupthink (Pal & Rastogi, 2024). Board diversity is the extent to which a board of directors integrates a range of experiences, expertise and perspectives, promoting a more inclusive decision-making process and improving the efficacy of governance (Pal & Rastogi, 2024). In Nigeria's corporate governance landscape, board diversity has become a strategic imperative for navigating complex stakeholder environments and promoting inclusivity in a historically male-dominated sector (Ibrahim & Okafor, 2023). The need for board diversity as an antecedent of operational efficiency arises from the observation that homogeneous boards, dominated by directors of similar gender, age and professional backgrounds, are prone to groupthink, conventional perspectives on strategy and resistance to change, which limit the innovative problem-solving needed to confront the unique operating challenges of the Bayelsa market (Okoye & Ezejiofor, 2021). A diverse board, by contrast, assembles a wider pool of experience, expertise and viewpoints, which may improve the quality of decisions bearing directly on cost control, process innovation and service delivery (Kagzi & Guha, 2018).

In this study, board diversity is proxied by gender diversity, age diversity and professional diversity. Gender diversity involves the proportion and equitable treatment of women on the board and across the organisation, and it introduces relational skills, ethical oversight and varied perspectives into board deliberations (Jebran & Chen, 2020). Gender-diverse boards bring different viewpoints, abilities and ideas that enrich decision-making and strengthen monitoring (EmadEldeen et al., 2021). Age diversity reflects the variance in directors' ages, balancing youthful dynamism and technological fluency with seasoned wisdom and institutional memory, thereby fostering adaptive strategies amid technological disruption; age-mixed boards have also been shown to strengthen the monitoring role of banking boards (Janahi et al., 2022; Venkatarathna & Shreya, 2025). Professional diversity pertains to the breadth of expertise represented on the board, spanning disciplines such as finance, law, engineering, marketing and information technology, and it is expected to enable comprehensive problem-solving and boost competitiveness (Kagzi & Guha, 2018; Ajayi et al., 2019). Collectively, these three dimensions democratise the boardroom and are hypothesised to bear on how efficiently Deposit Money Banks in Bayelsa State convert their inputs into services and revenue. In view of the foregoing, this study sought to investigate the nexus between board diversity and the operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria.

1.2 Statement of the Problem

The Nigerian banking sector, despite being the cornerstone of the nation's financial system, exhibits significant regional disparities in performance. In Bayelsa State, a hub of Nigeria's Niger Delta region, Deposit Money Banks are confronted with a persistent problem of weak operational efficiency. This problem is particularly alarming in the face of the Central Bank of Nigeria's ongoing 2026 recapitalisation reforms, which require banks to raise their shareholders' funds to ₦500 billion, ₦200 billion and ₦100 billion for international, national and regional



authorisations respectively, since operationally inefficient banks will struggle to generate the internal capital needed to meet these thresholds (Ugoani & Amu, 2020).

The problem manifests in several observable ways. Weak operational efficiency is reflected in high operational cost-to-income ratios, lengthy turnaround times for basic banking services and inefficient risk management practices. Banks in the state grapple with infrastructural challenges, including unreliable power supply and poor telecommunications networks, which force heavy reliance on expensive diesel generators and increase transaction processing times (Ugoani & Amu, 2020). These operational lapses spill over into the customer experience, where excessive bank charges, unexplained transaction failures, long queues and unresponsive service platforms are frequently reported (Eze & Nweke, 2019). There is also evidence of weak corporate governance mechanisms, including inadequate board oversight, which permits risky lending practices and undisciplined cost behaviour (Ehikioya, 2019).

The causes of this weak operational efficiency are multifaceted and deeply interwoven with the local and institutional context. Many banks, including those operating in Bayelsa State, have boards dominated by individuals with similar demographic and professional backgrounds, often concentrated in finance and accounting. This homogeneity breeds groupthink and limits the innovative problem-solving needed for the unique challenges of the Bayelsa market; for instance, a lack of gender and professional diversity may produce products, processes and risk models that do not adequately serve the informal sector or women-led businesses that constitute significant parts of the local economy (Okoye & Ezejiofor, 2021). Furthermore, the infrastructural deficits, security concerns related to restiveness and the economic mono-dependence of the Niger Delta region on the volatile oil and gas sector create exogenous pressures that inflate operational costs and credit risk. The effects of the problem are severe. Poor operational efficiency compresses margins, drives customers towards informal financial systems, undermines national financial inclusion goals and erodes the competitiveness of the affected banks. Banks in Bayelsa State risk falling behind, facing potential consolidation or even failure, if these performance deficiencies are not urgently addressed, and the distress of banks in the state could create contagion that threatens the stability of the broader Nigerian financial system (Adeyemi & Oboh, 2021).

Scholars have proffered various solutions to these performance weaknesses. Oyewo and Ajibolade (2023) argue that gender-diverse boards improve risk management and ethical oversight, while professional diversity, including members with information technology, marketing or environmental science backgrounds, fosters innovation in service delivery and risk assessment. Eze and Nweke (2019) recommend heavy investment in appropriate digital banking technologies, including robust mobile banking platforms, agency banking networks and data analytics, to reduce costs and improve the customer experience. Adeyemi and Oboh (2021) suggest that banks must consciously foster an inclusive, performance-oriented and adaptive culture in which leadership is committed to hearing diverse board voices and rewarding innovation.

However, despite the preponderance of suggested solutions, the challenge of weak operational efficiency persists among Deposit Money Banks in Bayelsa State. Besides, a review of the literature reveals that existing Nigerian studies on board diversity and bank performance are predominantly national in scope, focus overwhelmingly on accounting-based financial metrics rather than operational efficiency, and rarely deploy the Partial Least Squares-Structural Equation Modelling (PLS-SEM) technique to test the board diversity-operational efficiency linkage at the sub-national level (Ibrahim et al., 2023; Adetula & Oyedeko, 2023). This suggests contextual, operationalisation and methodological gaps in the literature. The point of departure of the present study, therefore, is its deliberate focus on operational efficiency as a distinct criterion variable, its sub-national concentration on Deposit Money Banks in Bayelsa State, and its deployment of PLS-SEM via SmartPLS to test the relationships between the three proxies of board diversity and operational efficiency. This study sought to close these lacunae.

1.3 Aim and Objectives of the Study

The aim of this study was to establish the relationship between board diversity and the operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria. Therefore, the specific objectives were to:

- i. assess the relationship between gender diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria;



- ii. investigate the relationship between age diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria; and
- iii. investigate the relationship between professional diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria.

1.4 Research Questions

Following the specific objectives, the following research questions were raised:

- i. What is the relationship between gender diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria?
- ii. What is the relationship between age diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria?
- iii. What is the relationship between professional diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria?

2.1 CONCEPTUAL FRAMEWORK

The conceptual framework of the study, presented in Figure 1, depicts the hypothesised relationships between the predictor variable, board diversity, proxied by gender diversity, age diversity and professional diversity, and the criterion variable, operational efficiency, of Deposit Money Banks in Bayelsa State, Nigeria. Each of the concepts in the framework is now critically reviewed.

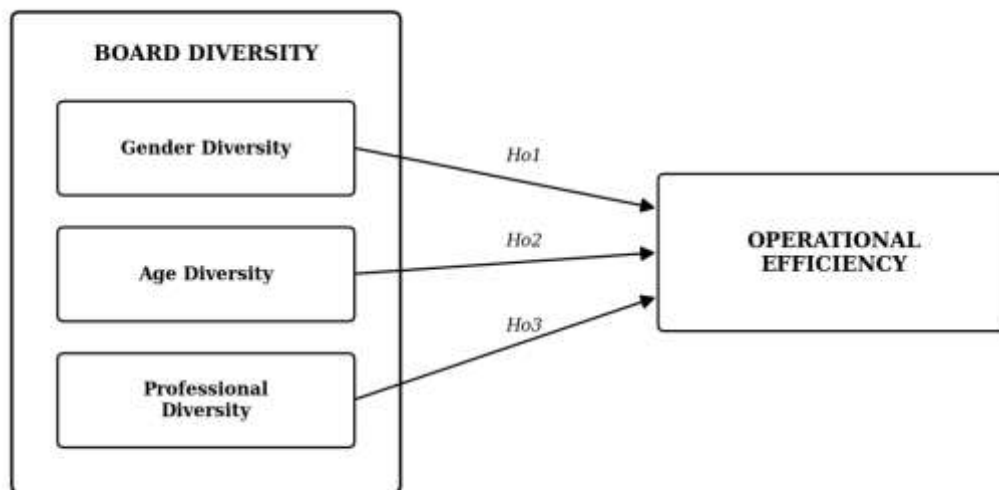


Figure 1: Operational Framework of Board Diversity and Operational Efficiency of Deposit Money Banks in Bayelsa State, Nigeria

Source: Researcher's Conceptualisation (2026); proxies of board diversity adapted from Pal and Rastogi (2024) and Kagzi and Guha (2018).

2.1.1 Board Diversity

Etymologically, the term diversity derives from the Latin *diversitas*, meaning difference or variety, while the notion of the board traces to the governance organ charged with directing corporate affairs. Conceptually, board diversity is the extent to which a board of directors integrates a range of experiences, expertise and perspectives, promoting a more inclusive decision-making process and improving the efficacy of governance (Pal & Rastogi, 2024). It refers to the inclusion of individuals from a variety of backgrounds, experiences and points of view on a company's board of directors, and this variety can take many forms, including gender, race, nationality, age, education, work experience and skill sets (Ibrahim & Okafor, 2023). Rahayu and Diah (2022) position corporate



board diversity at the centre of corporate governance, describing it as the composition of the board and the combination of the varied traits, attributes and characteristics of individual members in relation to decision-making and other board processes. Similarly, Ozgur (2020) defines board diversity as the variety of skills, knowledge and attributes that each board member brings to influence the decision-making process, while Adegboyegun and Igbekoyi (2022) view it as a varied combination of traits, skills and abilities that boardroom members contribute to decisions.

Scholarly arguments on the concept are contested. Proponents contend that board diversity is an important corporate governance tool for achieving effective management and oversight, fostering a wider range of ideas, objectives and values that support challenging deliberations and reduce groupthink (Song et al., 2020; Kagzi & Guha, 2018). Boards that lack diversity may produce lower-quality decisions, whereas heterogeneous boards attract a broad pool of experience, expertise and viewpoints that improve decision quality (Oladejo & Badmus, 2025). Critics, however, caution that diversity can slow decision-making, generate conflict and coordination costs, and may be adopted merely as a symbolic, legitimacy-seeking gesture rather than a substantive governance practice (Amahalu et al., 2023). The strengths of the concept lie in its capacity to enhance creativity, innovation, monitoring quality and stakeholder representation; its weaknesses lie in potential communication friction, slower consensus and the risk of tokenism. The implication of the concept is that board composition is a strategic choice with real performance consequences, not a mere compliance exercise.

2.1.2 Gender Diversity

The term gender originates from the Latin genus, meaning kind or type, and gender diversity denotes the balanced representation and equitable treatment of men and women within an organisation and, particularly, on its board. Definitions of gender diversity range from the presence of women on a business organisation's board to their visible density or percentage representation (Ajayi et al., 2019). Gender diversity brings different viewpoints, abilities and ideas to boards, enriching decision-making and improving social and environmental commitments (EmadEldeen et al., 2021). Onyali and Okerekeoti (2018) refer to gender diversity as the participation of female directors on corporate boards, while Abdussalam and Okike (2018) consider it in relation to the proportion of women on a company's board of directors. Kagzi and Guha (2018) explain gender diversity through three main lenses: the theoretical perspective, the moral and ethical perspective, and the business case perspective. Arguments on the concept are vigorous. The business case holds that gender-diverse boards improve firm performance, foster moral behaviour, enhance corporate reputation and strengthen corporate social responsibility (Kagzi & Guha, 2018), and that organisations gain a greater capacity to attract skilled employees, a favourable effect on creativity and innovation, and improved decision-making (Windscheid et al., 2018). Companies with diverse teams tend to report better decision-making and innovation that incorporates a range of viewpoints (Kansake & Dumakor-Dupey, 2021). Sceptics counter that gender diversity can increase conflict and reduce cohesion, and that persistent stereotypes and biases obstruct its effective implementation. The strengths of the concept include improved ethical oversight, richer market insight and stronger stakeholder legitimacy; its weaknesses include the possibility of tokenistic appointments and slower group processes. The implication is that the value of gender diversity depends on genuine inclusion rather than mere numerical representation (Mirza & Malik, 2019).

2.1.3 Age Diversity

Age derives from the Latin aetas, denoting the period of life, and age diversity refers to the acceptance and integration of all age groups within an organisation and on its board. Age is a diversity metric that indicates the various levels of cognition, knowledge and values that people possess (Schroeders et al., 2021), and an organisation that employs and values workers of all ages is said to be age-diverse (Ali & French, 2019). Venkatarathna and Shreya (2025) describe age diversity as the presence of individuals of various ages on the board who contribute fresh perspectives and expand the organisation's knowledge base, resulting in a culture of learning and improved handling of both immediate and long-term difficulties. In the boardroom context, the age diversity of directors may influence the board's ability to oversee and support management in creating and enforcing appropriate operational risk policies and standards (Jayanti et al., 2023), while Ridloah et al. (2022) view age diversity in terms of the size of the age distribution that a company's board possesses. Scholars argue both sides of the concept. On the positive side, age diversity balances the technological agility, flexibility and risk-taking appetite of younger members with the extensive networks, institutional memory and accumulated wisdom of senior members, and age-mixed boards have been found to strengthen board monitoring in banks



(Janahi et al., 2022). On the negative side, poorly managed age diversity can result in intergenerational friction, in-group favouritism, emotional instability and resistance to change. The strengths of the concept therefore lie in knowledge transfer, mentorship, innovation and succession continuity, while its weaknesses lie in the potential for generational conflict and value clashes. The implication is that the benefits of age diversity are contingent on deliberate intergenerational collaboration mechanisms rather than automatic.

2.1.4 Professional Diversity

The word profession stems from the Latin *professio*, a public declaration of expertise, and professional diversity denotes the breadth of occupational, educational and skill backgrounds represented on a board. Professional expertise and industry experience are crucial components of board diversity because they ensure that boards have the necessary skills and knowledge to offer strategic counsel and supervision in specific domains (Pal & Rastogi, 2024). Kagzi and Guha (2018) explain that professional and educational diversity can be analysed in two ways: by assessing the board members' levels of educational attainment, and by comparing the various disciplines of study represented on the board. In operational terms, professional diversity manifests as differences in educational specialisation, professional skills, entrepreneurial philosophy, expertise and working styles among board members (Ajayi et al., 2019). Arguments on the concept diverge. Advocates maintain that boards with diverse skill sets are better positioned to address complex organisational challenges, provide strategic advice and evaluate risk effectively, and that professionally diverse boards stimulate knowledge exchange and evidence-based decision-making (Kagzi & Guha, 2018; Egwakhe et al., 2019). Critics respond that broad professional variety may dilute the depth of banking-specific expertise on the board, generate coordination costs and produce members who operate in silos rather than contributing to core operations. The strengths of the concept include comprehensive problem-solving, richer risk assessment and innovation in service delivery; its weaknesses include possible knowledge fragmentation and the risk that non-finance professionals add legitimacy rather than substance. The implication is that professional diversity must be actively integrated, through induction, committee design and cross-functional deliberation, before it can yield performance dividends.

2.1.5 Operational Efficiency

Operational efficiency is etymologically rooted in the Latin *operatio*, meaning working or labour, and *efficientia*, meaning accomplishment or productive power. It denotes the bank's ability to maximise output, in the form of services and revenue, while minimising input, in the form of costs and resources, and it is often measured by metrics such as the cost-to-income ratio (Ugoani & Amu, 2020). Operational efficiency pertains to a company's capacity to reduce input waste and maximise resource utilisation simultaneously, enabling the delivery of high-quality, cost-effective goods and services to the final target market. Within Nigerian banking, operational efficiency has been shown to be closely intertwined with profitability, as efficient banks convert a larger share of income into earnings and internal capital (Ugoani & Amu, 2020), while efficiency-enhancing digital service channels compress transaction costs and improve turnaround time (Eze & Nweke, 2019). Scholarly arguments on the concept centre on a core tension: while efficiency is crucial for profitability and competitiveness, its relentless pursuit can incentivise detrimental short-termism and degrade service quality. The strength of the concept lies in providing clear, quantifiable targets for internal management, which is particularly vital in a high-cost operating environment like Bayelsa State; a key weakness, however, is its vulnerability to external shocks such as inflation, energy costs and infrastructural failure, which can distort efficiency ratios irrespective of managerial competence. The implication of the concept is that operationally inefficient banks will struggle to generate internal capital, a critical concern during the current recapitalisation era.

2.2 Theoretical Framework

This study is underpinned by two theories drawn from the corporate governance literature: the Resource Dependence Theory and the Institutional Theory.

2.2.1 Resource Dependence Theory (RDT)

In terms of historical origin, the Resource Dependence Theory was formally and most famously propounded by Jeffrey Pfeffer and Gerald R. Salancik in their seminal 1978 work, *The External Control of Organizations: A Resource Dependence Perspective*, although earlier work by Pfeffer (1972) laid the groundwork by conceptualising organisations as open systems deeply embedded in, and dependent on, their external environments



(Hillman et al., 2009). The theory posits that organisations are not autonomous entities but are constrained by a web of dependencies with other organisations that control critical resources such as capital, labour, information and legitimacy. Organisations must transact with external actors to obtain the resources necessary for survival, and this need creates dependencies and power differentials; the primary objective of the organisation is therefore to manage these external dependencies so as to reduce uncertainty and ensure a stable flow of resources (Pfeffer & Salancik, 1978). Regarding boards specifically, the theory views directors not merely as monitors but as resource providers who link the firm to its external environment through expertise, counsel, legitimacy and network channels. Scholarly arguments around the theory are twofold. First, effectiveness under RDT is defined as the organisation's capacity to acquire scarce and valued resources from its environment, rather than as narrow profit maximisation. Second, the theory holds that interdependence is a political condition: power within the organisation mirrors external dependencies, and this shifted organisational studies from purely rational-economic models towards political models of organisational behaviour (Davis & Cobb, 2010). In its applications, RDT is a dominant framework for explaining board composition; research demonstrates that boards are structured to match the environmental contingencies facing the firm, such that firms dependent on government relationships appoint directors with political or legal backgrounds (Hillman, 2005). In banking, where firms operate in a highly regulated environment and depend on depositor confidence, regulatory approval and liquidity, boards are composed of individuals who can provide legitimacy, financial expertise and regulatory linkages (Mollah & Zaman, 2015), and in developing economies like Nigeria, where institutional voids exist, the resource-provision role of directors becomes even more critical (Ujunwa, 2012). The strengths of the theory include its explanatory power over observable corporate actions such as interlocking directorates, its proactive view of management as capable of strategically manipulating environmental constraints, and its clear positive rationale for board diversity: heterogeneous boards bring heterogeneous resources, in the form of different networks, expertise and perspectives, thereby reducing environmental uncertainty more effectively than homogeneous boards (Carter et al., 2010; Hillman et al., 2009). Its weaknesses include an overemphasis on external constraints relative to internal organisational dynamics, a tendency towards tautological reasoning in which board composition is assumed to reflect dependency management simply because the firm survives, and the empirical difficulty of measuring dependence and uncertainty (Davis & Cobb, 2010). The implication of the theory is that board composition is a strategic response to environmental resource scarcity. Its relevance to the present study is compelling: gender diversity may provide access to different market segments and enhanced legitimacy with diverse stakeholders, thereby bearing on operational efficiency (Ntim, 2015); age diversity provides a mix of the experience and institutional memory of older directors with the technological adaptability and innovative risk appetite of younger directors; and professional diversity constitutes a direct resource portfolio that supplies expert counsel on the complex regulatory, financial and operational challenges peculiar to Deposit Money Banks in Bayelsa State (Ujunwa, 2012).

2.2.2 Institutional Theory

With respect to historical origin, the Institutional Theory in its modern organisational form was propounded by Paul DiMaggio and Walter Powell in 1983 through their seminal article on institutional isomorphism, which explained why organisations in the same field grow increasingly alike (DiMaggio & Powell, 1983). The theory places a strong emphasis on how formal and informal environmental factors influence organisational behaviour, distinguishing three isomorphic forces: coercive pressures arising from regulations, laws and social expectations; normative pressures arising from professional standards and values; and mimetic pressures whereby uncertainty drives organisations to imitate successful peers (DiMaggio & Powell, 1983). The theory's central claim is that organisational conduct is shaped more by the need to conform to institutional demands and socially constructed norms than by internal efficiency considerations, and that conformity to institutional standards improves an organisation's legitimacy, reputation and long-term survival (Scott, 2014). Scholarly arguments on the theory are divided. Its supporters credit it with explaining the diffusion of governance practices, including board diversity codes, across firms and countries. Its critics fault its excessive focus on compliance at the expense of agency, creativity and strategic decision-making, portraying organisations as passive players rather than proactive entities capable of shaping their environments (Hirsch & Lounsbury, 1997), and note its difficulty in explaining institutional change since it treats institutions as durable and stable structures (Greenwood et al., 2008; Adegbite, 2015).



The strengths of the theory include its power to explain the adoption of practices whose performance benefits are uncertain, and its recognition that legitimacy is itself a survival-critical resource. Its weaknesses include the underplaying of power relations and contextual variation, and its limited treatment of organisations as strategic actors (Greenwood et al., 2008). The implication of the theory is that corporate governance practices such as board diversity may be implemented not solely for anticipated performance benefits but to signal conformity to societal expectations and regulatory guidelines, thereby securing resources and social support. The relevance of the theory to the present study is twofold. First, it explains the drivers behind the adoption of gender, age and professional diversity by Deposit Money Banks in Bayelsa State. Second, and critically, it raises the possibility that diversity may be a ceremonial, legitimacy-seeking gesture that is decoupled from actual decision-making processes (Scott, 2014).

2.3 Empirical Review

In line with the research objectives, the following empirical studies on board diversity and its dimensions, in relation to operational efficiency and organisational performance, were reviewed.

Oladejo and Badmus (2025) studied the impact of board diversity on the profitability of selected consumer goods manufacturing firms in Nigeria. In terms of methodology, descriptive and ex-post-facto research designs were employed; the homogeneous purposive sampling method was used to select ten listed companies; secondary data were sourced from audited annual reports; and the data were analysed using descriptive analysis and panel regression at a 5% significance level. The findings indicated that CEO duality ($p = 0.0253$), ethnic diversity ($p = 0.0018$) and educational background ($p = 0.0167$) positively impacted profitability, while the pooled regression showed that CEO duality, financial skill and educational diversity significantly influenced profitability measured by return on assets. Compared with the present study, both works examine board diversity in a Nigerian context, but Oladejo and Badmus (2025) studied manufacturing firms using secondary data and panel regression, whereas the present study examines Deposit Money Banks in Bayelsa State using primary data and PLS-SEM, and it isolates operational efficiency as the criterion variable. The gap in the literature is the absence of a banking-sector, sub-national, perception-based test of the board diversity-operational efficiency nexus, which the present study fills.

Furthermore, Eyanuku (2025) examined the effect of strategic diversity on organisational resilience among small and medium-sized enterprises in Abuja, Nigeria. Methodologically, a cross-sectional survey design was employed; random sampling was used to select a sample of 359 SMEs; data were collected through a structured questionnaire; and descriptive statistics and correlational analysis were used to evaluate the relationships among the variables. The findings showed that all three aspects of strategic diversity positively and significantly impacted the organisational resilience of SMEs, and the study recommended that SME owners actively promote an inclusive and diverse workplace across age, gender and ethnic lines. In comparison with the present study, both employ cross-sectional surveys and primary data within Nigeria, but Eyanuku (2025) studied SMEs and organisational resilience, whereas the present study examines Deposit Money Banks and operational efficiency, and applies PLS-SEM rather than conventional correlational statistics. The gap is the non-coverage of the banking sector, the operational efficiency criterion and the Bayelsa State context.

Likewise, Nzulwa and Omondi (2024) studied board diversity and governance outcomes of state corporations in Kenya. The methodology involved a descriptive survey design; a 20% sample of 28 state corporations was chosen using simple random sampling; primary data were collected with a structured questionnaire; and the data were analysed using simple regression via SPSS version 21. The study found a strong positive correlation between board diversity and inclusion and the governance outcomes of Kenyan state corporations, concluding that diversity is a major factor influencing corporate governance outcomes and advising businesses to mainstream diversity and inclusion. Compared with the present study, both adopt survey designs with primary data, but Nzulwa and Omondi (2024) examined state corporations in Kenya with governance outcomes as the criterion, while the present study examines Nigerian Deposit Money Banks with operational efficiency as the criterion and uses the more robust PLS-SEM technique. The gap lies in the geographical context, sector and analytical technique.

In addition, Shaikh (2024) examined the impact of board diversity on organisational culture and firm performance. In terms of methodology, a mixed-methods research design was used; stratified random sampling produced a sample of 200 respondents; data were gathered through questionnaire and in-depth interviews; and the quantitative



data were analysed using descriptive statistics, Pearson correlation and multiple regression in SPSS version 26. The findings revealed that board diversity positively correlated with firm performance ($r = .539, p < .01$) and organisational culture ($r = .682, p < .01$), that board diversity predicted 49% of the variance in organisational culture, and that organisational culture mediated 59% of the diversity-performance relationship. Compared with the present study, both interrogate the diversity-performance nexus using primary data, but Shaikh (2024) treated performance globally and emphasised the mediating role of culture, while the present study decomposes diversity into gender, age and professional dimensions and isolates operational efficiency using PLS-SEM. The gap is the absence of a decomposed, efficiency-specific test within the Nigerian banking industry.

Moreso, Ume and Araga (2024) examined diversity and the performance of business organisations among selected Deposit Money Banks in Abuja, Nigeria. Methodologically, a cross-sectional survey design was employed; simple random sampling procedures were used to select respondents; the Taro Yamane formula produced a sample size of 240 participants; data were collected on a five-point Likert scale; and analysis was performed using multiple regression in SPSS. The findings showed that gender diversity, cultural diversity, age generational gap diversity and employee political influence diversity each positively impacted bank performance, and that workforce diversity overall significantly correlated with the performance of commercial organisations. In comparison with the present study, both examine Nigerian Deposit Money Banks using cross-sectional surveys, but Ume and Araga (2024) focused on Abuja and general bank performance using multiple regression, while the present study focuses on Bayelsa State, isolates operational efficiency and deploys PLS-SEM. The gap is the untested Bayelsa context and the unexamined operational efficiency criterion.

Ibrahim et al. (2023) explored the effect of board diversity on the financial performance of listed Deposit Money Banks in Nigeria. The methodology adopted an ex-post-facto research design; the census sampling technique brought all 14 listed Deposit Money Banks into the sample; secondary data were collected from annual reports; and the data were analysed with descriptive and inferential statistics, including correlation and multiple regression, using STATA version 14. The study discovered that while gender diversity had a strong negative link with financial performance, age and expertise diversity had a considerable favourable influence, and it recommended that banks incorporate a varied age range into their boardroom culture. Compared with the present study, both examine Nigerian Deposit Money Banks and decompose diversity into gender, age and professional or expertise dimensions, but Ibrahim et al. (2023) used secondary accounting data at the national level, whereas the present study uses primary perceptual data at the sub-national level and measures operational efficiency rather than accounting returns. The gap is the reliance of prior work on financial metrics and national samples, which the present study addresses.

Still, Ong'ayi and Odari (2023) investigated board diversity and the performance of commercial banks in Nairobi City County, Kenya. The methodology employed a descriptive research design; a sample of 328 respondents was selected through stratified random sampling; questionnaires served as the data collection instrument; and analysis used ANOVA, t-tests, Pearson correlation, p-values and the coefficient of determination. The study found that the performance of tier-one commercial banks was strongly and positively correlated with functional background, age diversity, board member independence and gender diversity, concluding that a combination of these attributes is required to improve bank performance. Compared with the present study, both focus on commercial banking and use stratified sampling of primary data, but Ong'ayi and Odari (2023) studied Kenyan banks and aggregate performance with classical statistics, whereas the present study examines Nigerian banks in Bayelsa State and isolates operational efficiency using PLS-SEM. The gap is contextual and methodological.

Likewise, Engairo (2023) explored the effect of gender diversity on the organisational performance of GlaxoSmithKline (GSK) Kenya. Methodologically, a descriptive research design was used; forty-five respondents were chosen through stratified random sampling; questionnaires were the main data collection instrument; and both descriptive and inferential statistics were employed. The study found a favourable and significant correlation between gender diversity and operational effectiveness ($r = 0.752, p = 0.000$), and regression results showed that gender diversity positively and significantly related to organisational success ($\beta = 0.175, p = 0.037$), leading to the recommendation that managers view gender diversity as a source of internal competitive advantage. Compared with the present study, both examine the gender diversity-efficiency linkage with primary data, but Engairo (2023) studied a single pharmaceutical firm in Kenya, while the present study covers sixteen bank branches in Bayelsa State, Nigeria, adds age and professional diversity, and applies PLS-SEM. The gap is the single-firm, single-dimension scope of the prior study.



One the other hand, Ogaluzor and Chukwu (2022) conducted a research investigation into board members' age diversity and corporate earnings quality in Nigeria. Methodologically, the positivist investigation used a panel data approach; a sample of 21 purposively chosen insurance companies was studied; only secondary data from published annual reports were used; and parametric statistics served as the analytical method. The results indicated a strong correlation between board age diversity and the accrual quality of Nigerian listed insurance businesses, as well as a strong correlation between board age diversity and sustained profitability, and the study advised that businesses include a broad age range in board membership so as to draw from both the young and the old. Compared with the present study, both interrogate the performance consequences of age diversity in Nigeria, but Ogaluzor and Chukwu (2022) studied insurance firms with archival earnings data, while the present study examines Deposit Money Banks in Bayelsa State with primary data, an operational efficiency criterion and the PLS-SEM technique. The gap is sectoral, contextual and methodological.

Relatedly, Ajayi et al. (2019) explored board diversity and the financial efficiency of insurance firms in Nigeria. The methodology used a survey research design; a mixed sampling technique combining purposive sampling and complete enumeration was employed; the sample comprised 359 directors and executive management representatives of the top 20 listed insurance companies; data were gathered using a standardised questionnaire; and analysis relied on descriptive statistics and the Pearson Product Moment Correlation technique. The results indicated a substantial positive and significant correlation between financial efficiency and the board diversity components of gender diversity, board composition, board size, professional diversity and ethnic diversity, and the study recommended institutionalising diverse independent boards. Compared with the present study, both examine diversity-efficiency linkages in Nigerian financial services using surveys of primary data, but Ajayi et al. (2019) studied insurance firms and financial efficiency using bivariate correlation, whereas the present study examines Deposit Money Banks in Bayelsa State and operational efficiency using PLS-SEM. The gap is the untested Bayelsa State context, and the superior multivariate modelling adopted here.

2.4 Research Hypotheses

Flowing from the research questions and the reviewed literature, the following null hypotheses were formulated to provide tentative answers to the research questions:

Ho1: There is no significant relationship between gender diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria.

Ho2: There is no significant relationship between age diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria.

Ho3: There is no significant relationship between professional diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria.

3.1 METHODOLOGY

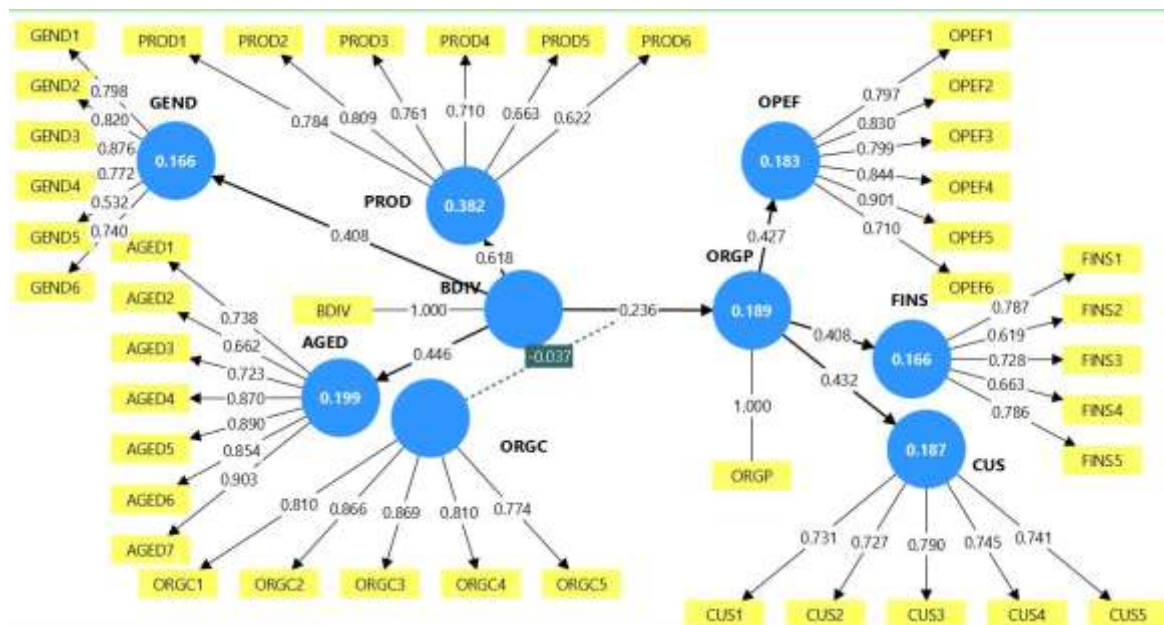
This study adopted a cross-sectional survey research design, justified by the fact that the study took place at a single point in time and involved no manipulation or control of variables by the researcher. The philosophical foundation of the study was the positivist paradigm. The population of the study comprised all the Deposit Money Banks in Bayelsa State. Data obtained from research collaborators and the annual reports of the respective banks revealed an accessible population of 280 middle-top level staff of the sixteen Deposit Money Bank branches in Yenagoa, Bayelsa State, consisting of branch managers, operations managers, internal control unit heads, commercial banking unit heads, retail banking unit heads, customer service officers, funds transfer officers, cash officers and relationship managers. Based on this population of 280 elements, the study utilised the Krejcie and Morgan (1970) sample size determination table to arrive at a sample size of 162 respondents. The Bowley proportional sample allocation formula, expressed as $n_h = nN_h/N$, where n_h is the number of units allocated to each bank, n is the total sample size, N_h is the staff strength of each bank and N is the population, was deployed to derive a representative proportionate sample from each Deposit Money Bank in Yenagoa. The stratified random sampling technique was adopted, with each bank constituting a stratum, to ensure that every member of the population had an equal chance of selection and that each subgroup was adequately represented. The nature of the data was quantitative, and the study utilised primary data collected through a structured, closed-ended questionnaire anchored on a five-point Likert scale ranging from strongly agree (5) to strongly disagree (1). Face and content validity were assured through the exhaustive examination of the instrument by the supervisors and randomly selected industry specialists, while construct validity was assessed statistically through convergent validity, using the Average Variance Extracted (AVE) with a 0.50 benchmark, and discriminant validity, using



the Fornell and Larcker (1981) criterion. The reliability of the instrument was established through a pilot survey of 30 respondents, which returned Cronbach's alpha coefficients of 0.742 for gender diversity, 0.760 for age diversity, 0.874 for professional diversity and 0.806 for operational efficiency, all exceeding the 0.70 threshold recommended by Nunnally and Bernstein (1994). The Partial Least Squares-Structural Equation Modelling (PLS-SEM) technique was deployed to test the hypotheses at the 0.05 level of significance via SmartPLS 4.1.1.1. The technique is ideal as it imposes minimal demands on measurement scales, sample size and distributional assumptions (Hair et al., 2021). PLS-SEM involves the assessment of the measurement (outer) model and the structural (inner) model. For the decision rule, path coefficients (β values) of 0.10 to 0.29, 0.30 to 0.49 and 0.50 to 1.0 were interpreted as weak, moderate and strong relationships respectively (Cohen, 1988); for a two-tailed test, t-values greater than 1.96 and p-values less than 0.05 were accepted as the significance cut-off points (Hair et al., 2021); and R^2 values of 0.25, 0.50 and 0.75 were interpreted as weak, moderate and substantial levels of predictive accuracy respectively (Hair et al., 2021).

4.1 Analysis and Results

A total of 162 copies of the questionnaire were administered to respondents across the selected Deposit Money Banks in Yenagoa, Bayelsa State. Of these, 145 copies were successfully retrieved, yielding a retrieval rate of 89.51%, while 5 copies were found to be defective on account of incomplete sections and multiple ticking. Consequently, 140 correctly completed copies, representing 86.42% of the administered instrument, were used for the analysis, a response rate considered highly satisfactory for survey-based structural equation modelling. Before testing the hypotheses, the reflective measurement model was assessed against the recommended thresholds of outer loadings above 0.70 (Hulland, 1999), Cronbach's alpha and composite reliability of at least 0.70 (Nunnally & Bernstein, 1994), and an Average Variance Extracted of at least 0.50 (Fornell & Larcker, 1981). The gender diversity construct returned an AVE of 0.584, a composite reliability of 0.892 and a Cronbach's alpha of 0.853; the age diversity construct returned an AVE of 0.657, a composite reliability of 0.930 and a Cronbach's alpha of 0.914; the professional diversity construct returned an AVE of 0.530, a composite reliability of 0.870 and a Cronbach's alpha of 0.826; and the operational efficiency construct returned an AVE of 0.665, a composite reliability of 0.922 and a Cronbach's alpha of 0.899, with its retained indicators loading between 0.797 and 0.901. These results confirm the convergent validity and internal consistency reliability of all the constructs. In addition, the Fornell and Larcker criterion demonstrated that the square root of each construct's AVE exceeded its correlations with all other constructs, thereby establishing discriminant validity. The measurement model, after the deletion of the weak items, is presented in Figure 2.



Source: SmartPLS 4.1.1.1 Output of Research Data, 2026

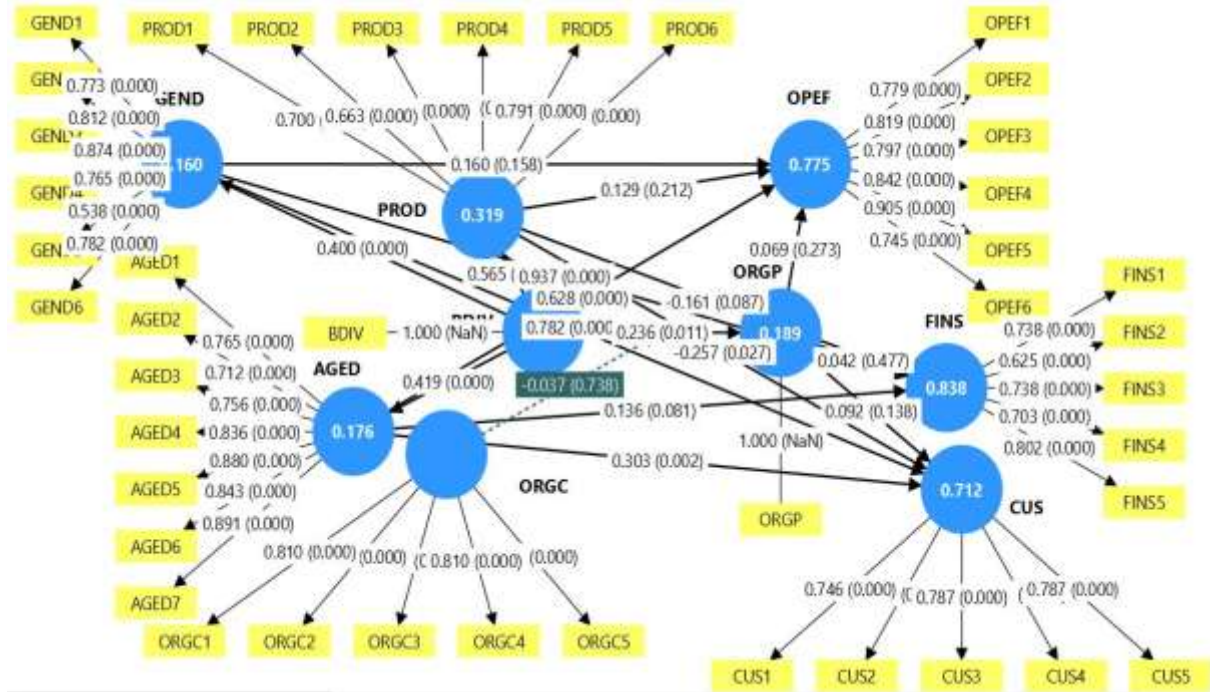


Figure 3: Structural Model with p-values

Source: SmartPLS 4.1.1.1 Output of Research Data, 2026

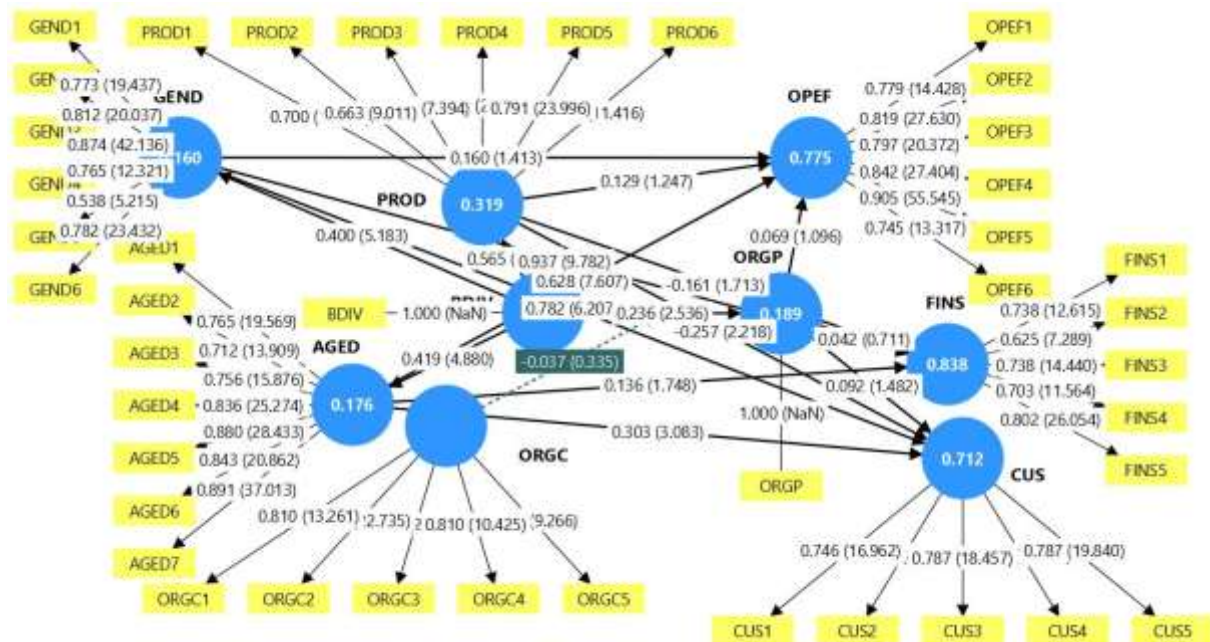


Figure 4: Structural Model with t-values

Source: SmartPLS 4.1.1.1 Output of Research Data, 2026



Table 1: Results of Hypotheses Testing

Null Hypotheses	Stages	Path Coefficients (β)	R ²	T Statistics (t) ≥ 1.96	P Values (p) < 0.05	Decision on Null Hypotheses
Ho1	GEND → OPEF	0.160 (Weak)	0.325 (Moderate)	1.413 (Not Significant)	0.158 (Not Significant)	Supported
Ho2	AGED → OPEF	0.628 (Strong)	0.765 (Strong)	7.607 (Significant)	0.000 (Significant)	Not Supported
Ho3	PROD → OPEF	0.129 (Weak)	0.311 (Moderate)	1.247 (Not Significant)	0.212 (Not Significant)	Supported

Source: SmartPLS 4.1.1.1 Output of Research Data, 2026

As revealed in Table 1 and Figures 3 and 4, two null hypotheses were supported while one null hypothesis was not supported. For the first hypothesis, the path coefficient of 0.160 falls within Cohen's (1988) weak range, the t-value of 1.413 falls below the 1.96 critical threshold and the p-value of 0.158 exceeds 0.05; the study therefore found a weak positive but not significant relationship between gender diversity and operational efficiency, and the null hypothesis was supported. The R² of 0.325 indicates that gender diversity explains approximately 32.5% of the variance in operational efficiency, leaving a substantial 67.5% unexplained. For the second hypothesis, the path coefficient of 0.628 falls within the strong range, the t-value of 7.607 far exceeds 1.96 and the p-value of 0.000 is below 0.05; the study therefore found a strong positive and significant relationship between age diversity and operational efficiency, and the null hypothesis was not supported, with the R² of 0.765 indicating substantial predictive accuracy in which age diversity explains 76.5% of the variance in operational efficiency. For the third hypothesis, the path coefficient of 0.129 is weak, the t-value of 1.247 is below 1.96 and the p-value of 0.212 exceeds 0.05; the study therefore found a weak positive but not significant relationship between professional diversity and operational efficiency, and the null hypothesis was supported, with the R² of 0.311 indicating that professional diversity explains only 31.1% of the variance in operational efficiency.

4.2 Discussion of Findings

4.2.1 Relationship between Gender Diversity and Operational Efficiency of Deposit Money Banks in Bayelsa State, Nigeria

The first null hypothesis stated that there is no significant relationship between gender diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria. The study found a weak positive but not significant relationship between gender diversity and operational efficiency ($\beta = 0.160$; $t = 1.413$; $p = 0.158$; $R^2 = 0.325$). In terms of strength, the relationship is weak; in terms of direction, it is positive; and in terms of significance, it is not significant, meaning that although gender diversity and operational efficiency move in the same direction, the association is too modest to establish a meaningful predictive relationship. The implication of this finding is that merely increasing the representation of women on bank boards may not automatically yield improvements in operational efficiency metrics. A possible reason for the finding is that the resource benefits potentially derived from gender diversity, such as varied perspectives, relational skills and ethical oversight, may not be directly translating into streamlined internal processes in the specific context of Bayelsa State, either because of contextual factors unique to the Nigerian banking sector or because operational efficiency is influenced by a broader range of factors, such as infrastructure, technology and cost structures, than board composition alone. From the perspective of Institutional Theory, the finding may also indicate that gender diversity is being pursued primarily for legitimacy and conformity to regulatory and societal expectations rather than for its instrumental value in enhancing operational processes (Scott, 2014). This finding is unexpected, and so it carries an element of surprise, given the weight of literature associating gender diversity with efficiency gains. It disagrees with Engairo (2023), who found a favourable and significant correlation between gender diversity and operational effectiveness, and with Ume and Araga (2024), who found that gender diversity positively impacted the performance of Deposit Money Banks in Abuja. It also disagrees with Oladejo and Badmus (2025), who found that board diversity traits, including gender, positively impacted profitability, and with Ajayi et al. (2019), who reported a significant correlation between gender diversity and the financial efficiency of insurance firms. However, the finding agrees



with Adetula and Oyedeko (2023), who concluded that the performance of Nigerian Deposit Money Banks is not significantly impacted by board gender diversity. With respect to theory, the finding does not support a simple application of the Resource Dependence Theory, which would predict that the distinct resources female directors provide should improve efficiency outcomes (Pfeffer & Salancik, 1978); rather, it lends credence to the Institutional Theory's decoupling thesis, whereby diversity adopted for legitimacy may remain ceremonially detached from the internal processes that drive efficiency.

4.2.2 Relationship between Age Diversity and Operational Efficiency of Deposit Money Banks in Bayelsa State, Nigeria

The second null hypothesis stated that there is no significant relationship between age diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria. The study found a strong positive and significant relationship between age diversity and operational efficiency ($\beta = 0.628$; $t = 7.607$; $p = 0.000$; $R^2 = 0.765$). In terms of strength, the relationship is strong; in terms of direction, it is positive; and in terms of significance, it is significant, indicating that boards composed of members from different generational cohorts are associated with markedly higher operational efficiency. The implication of this finding is that age diversity constitutes a critical intangible resource for the banks studied. Older board members contribute deep-seated industry experience, institutional memory and wisdom accumulated over decades, offering insights into risk management and established operational protocols that prevent costly errors, while younger members are more attuned to contemporary market trends, cutting-edge financial technologies and digital service delivery, and champion more agile and innovative operational processes. The combination of these distinct resources creates a more holistic and capable strategic oversight function, resulting in streamlined processes, quicker adaptation to market shifts and more efficient resource allocation, which are the core components of operational efficiency. This synthesis is a plausible reason for the strength of the observed relationship. This finding was expected, and so it carries no element of surprise, as it is consistent with the theoretical expectation that generational complementarity enhances internal processes. It agrees with Ajayi et al. (2019), who found a substantial correlation between board diversity components and financial efficiency; with Ibrahim et al. (2023), who found that age diversity had a considerable favourable influence on the performance of listed Deposit Money Banks; with Ong'ayi and Odari (2023), who found that age diversity was strongly and positively correlated with the performance of commercial banks in Nairobi; and with Ogaluzor and Chukwu (2022), who found strong correlations between board age diversity and both earnings quality and sustained profitability. In terms of theory, the finding provides powerful empirical validation for the Resource Dependence Theory, confirming that the experiential and technological resources supplied by a multigenerational board reduce uncertainty and enhance organisational effectiveness (Pfeffer & Salancik, 1978; Hillman et al., 2009), and it suggests that, unlike gender diversity, age diversity in these banks is substantively integrated into decision-making rather than being merely ceremonial.

4.2.3 Relationship between Professional Diversity and Operational Efficiency of Deposit Money Banks in Bayelsa State, Nigeria

The third null hypothesis stated that there is no significant relationship between professional diversity and operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria. The study found a weak positive but not significant relationship between professional diversity and operational efficiency ($\beta = 0.129$; $t = 1.247$; $p = 0.212$; $R^2 = 0.311$). In terms of strength, the relationship is weak; in terms of direction, it is positive; and in terms of significance, it is not significant. The implication of this finding is that assembling a board of members from diverse professional backgrounds, such as accounting, law, marketing, information technology and human resources, does not by itself enhance operational efficiency. One possible reason is that operational efficiency may be primarily driven by specific technical and managerial banking expertise rather than by broad professional diversity per se; the presence of lawyers, human resource professionals or marketing experts, while valuable for other organisational outcomes, may not directly contribute to the streamlining of banking operations. Another possible reason is that the mechanisms through which professional diversity could influence efficiency are indirect or contingent on enabling conditions, such as a strong collaborative culture, effective board leadership and clearly defined roles that leverage diverse expertise, and the absence of such conditions would leave the direct relationship weak. Viewed through Institutional Theory, professional diversity on these boards may be driven more by institutional pressures for legitimacy, regulatory conformity and mimetic imitation of successful peers than by a genuine strategic imperative to enhance operational efficiency, in which case it serves a symbolic rather than substantive function (DiMaggio & Powell, 1983; Scott, 2014). This finding is unexpected, and therefore carries



an element of surprise, because the expertise-based logic of board resource provision predicts efficiency gains from professional breadth. It disagrees with Ajayi et al. (2019) and Egwakhe et al. (2019), who found significant positive relationships between professional diversity and the financial efficiency and profitability of Nigerian insurance firms, and with Ong'ayi and Odari (2023), who found functional background to be strongly correlated with bank performance in Kenya. It is, however, directionally consistent with Adetula and Oyedeko (2023), whose Nigerian banking evidence showed diversity attributes exerting negligible effects on performance. In terms of theory, the finding tempers a broad application of the Resource Dependence Theory by demonstrating that not every form of diversity automatically constitutes a performance-enhancing resource; the resource value of professional diversity appears contingent on effective integration, while the Institutional Theory's ceremonial-adoption thesis offers a coherent explanation for the observed decoupling between professional board breadth and internal efficiency outcomes.

5.0 CONCLUSION

This study investigated the relationship between board diversity, proxied by gender diversity, age diversity and professional diversity, and the operational efficiency of Deposit Money Banks in Bayelsa State, Nigeria. On the strength of the empirical evidence, the study concludes that age diversity is the dominant board diversity driver of operational efficiency among Deposit Money Banks in Bayelsa State: the strong, positive and significant relationship between age diversity and operational efficiency demonstrates that boards which blend the operational wisdom, institutional memory and prudence of older directors with the technological fluency, agility and innovative energy of younger directors achieve markedly superior internal processes. Conversely, the weak and non-significant relationships between gender diversity and operational efficiency, and between professional diversity and operational efficiency, lead to the conclusion that the mere numerical presence of women or of professionals from varied fields on bank boards does not, by itself, translate into streamlined operations; these dimensions of diversity appear to require deliberate integration mechanisms before their latent value can be converted into efficiency gains. From a theoretical standpoint, the findings offer a conditional validation of the Resource Dependence Theory: diverse boards do supply performance-relevant resources, but only where, as with age diversity, those resources bear directly on the operational domain and are substantively deployed. The findings simultaneously lend credence to the Institutional Theory's decoupling thesis, since gender and professional diversity, plausibly adopted in response to regulatory and societal pressures, showed no significant association with the substantive outcome of operational efficiency. The overall conclusion is that board diversity is not a monolithic prescription; its efficiency dividends in the Bayelsa State banking context are dimension-specific, and policy and managerial action should be calibrated accordingly.

5.1 Recommendations

Based on the specific findings from the tested hypotheses, the following recommendations are proffered/

- i. Managers of Deposit Money Banks in Bayelsa State, Nigeria, should not abandon their gender diversification efforts but should complement them with targeted interventions. Since the presence of women on boards does not automatically translate into streamlined internal processes, management should implement specific training and mentorship programmes that equip female board members with the operational skills and authority needed to influence efficiency-related decisions, in order to improve operational efficiency.
- ii. The management of Deposit Money Banks in Bayelsa State, Nigeria, should deliberately create inter-generational boards, in order to optimise internal processes and sustain operational efficiency. They should do this by ensuring a balanced mix of youthful and experienced members at every board renewal, combining the operational wisdom of older directors with the technological fluency and innovative energy of younger directors, and by institutionalising structured mentorship and reverse-mentorship arrangements between the generations.
- iii. Managers of Deposit Money Banks in Bayelsa State, Nigeria, should restructure how they integrate professionals from varied fields, in order to convert professional diversity into operational gains. Since professionals from different backgrounds may currently be operating in silos rather than contributing to core banking operations, management should establish cross-functional board committees and provide intensive banking-sector induction for non-finance professionals, so that their expertise is translated into process improvement, cost control and service delivery outcomes.



5.2 Contributions to Knowledge

The contributions of the study to the body of knowledge are stated as follows: First, the study provides context-specific empirical evidence on the board diversity-operational efficiency nexus among Deposit Money Banks in Bayelsa State, Nigeria, thereby filling a critical geographical and sectoral gap, since prior Nigerian evidence is predominantly national in scope and centred on accounting-based financial metrics. Second, the study makes a theoretical contribution by jointly testing the Resource Dependence Theory and the Institutional Theory within a single empirical model of banking efficiency. The strong positive link between age diversity and operational efficiency reinforces the Resource Dependence Theory, while the weak, non-significant links involving gender and professional diversity advance a more conditional application of the theory and provide empirical support for the Institutional Theory's ceremonial-adoption and decoupling propositions in an emerging-market banking context. Third, from a methodological standpoint, the study demonstrates the application of the Partial Least Squares-Structural Equation Modelling technique via SmartPLS to a sub-national banking sample, showing that rigorous variance-based structural modelling of measurement and structural relationships is feasible and valuable even outside large, multi-country datasets, and thereby offering a methodological template for future governance research in similar niche contexts across Africa.

5.3 Limitations and Suggestions for Further Studies

The study is subject to certain limitations, which in turn suggest directions for further research. First, the study is geographically confined to Deposit Money Banks operating in Bayelsa State, which restricts the generalisability of the findings to the entire Nigerian banking sector, since the socio-economic, cultural and regulatory nuances unique to Bayelsa State may have influenced the relationships observed. Future studies should extend the geographical scope to a representative sample of Deposit Money Banks across the six geopolitical zones of Nigeria, so as to enhance generalisability and permit comparative regional analysis. Second, the cross-sectional design captured perceptions at a single point in time, offering only a static snapshot of the relationships and precluding definitive causal inference. Longitudinal studies tracking board composition and operational efficiency over several years are suggested, in order to reveal the temporal dynamics and long-term impact of board diversity on efficiency.

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