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THE ROLE OF THE ACCOUNTANTS IN TRANSFORMING NIGERIAN FISCAL SPACE FOR ACHIEVING SUSTAINABLE ECONOMIC DEVELOPMENT

BOOK OF PROCEEDINGS

Edited By

Prof. James O. Alabede

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The Role of the Accountants in Transforming Nigerian Fiscal Space for Achieving Sustainable Economic Development

Book of Proceedings of First National Conference

Department of Accounting,
Faculty of Management Sciences
Taraba State University, Jalingo, Nigeria
25th -28th June, 2024

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PROLOGUE

Prof. James O. Alabede conceived the idea of organizing an academic conference when he was appointed Head of the Department on 4th July 2023 as part of his agenda for moving the Department forward academically. The idea to organise the conference was made official in the Departmental board meeting held on 14th August 2023. As part of preparation for the conference, 12 members of the Local Organising Committee (LOC) were appointed.

However, due to preparation for the NUC and ICAN re-accreditation of the undergraduate programme of the Department, the preparation of the conference was suspended. On the conclusion of the ICAN reaccreditation exercise in January 2024, the LOC was expanded and reconstituted in February 2024 with the following members and terms of reference:

1.	Prof. J. O. Alabede	Chairman
4.	Dr. Susan P. Teru	Member
3.	Usman S. Aliyu	Member
4.	Olayinka Gabriel	Member
5.	Lukman Bello	Member
6.	Sabo Ahmed	Member
7.	Jamilu Babayo	Member
8.	Lenge D. Shaki	Member
9.	Maurice Agor Adiga	Member
10.	Asma'u Usman	Member
11.	Asma'u Usman	Member
12.	Nomiri J. Bainamai	Member
13.	Zainab I. Bawuro	Member
14.	Kwanti A. Alfred	Member/ LOC Secretary I
15.	Dr. Usman Tanimu Gadi	Member/ LOC Secretary II

The terms of reference of the Committee are:

i. To advise the Department on the nature of the conference that should be organized taking into consideration the capacity of the Department, circumstances prevailing in the University and Nigeria as a whole.
ii. To suggest the main theme and sub-themes of the conference.
iii. To suggest dignitaries to be invited to grace the conference as chairman, guest speaker(s), etc.
iv. To advise the Department on a suitable date in the second quarter of 2024 when the conference should be held.
v. To publicise and disseminate information about the conference among the relevant groups within and outside Nigeria.
vi. To identify possible sources of funds to finance the conference and set up a mechanism to mobilise funds from the identified sources.

vii. To prepare a working budget for the conference and ensure that the funds for the conference are judiciously used.
viii. To mobilise other necessary logistics to organize the conference.

Before the inauguration of the LOC on 19th March 2024, the Department sought approval from the VC to organize the conference and the approval was granted on the 7th March 2024. At the inauguration of the LOC, the date of the conference, the title of the conference, and the dignitaries to grace the conference including the lead paper presenter, keynote speaker, and other related matters were considered, deliberated, and agreed upon. To ensure the success of the conference, some subcommittees were established including the Publicity and Contact Subcommittee, the Decoration and Entertainment Subcommittee, the Logistics Subcommittee, etc.

The conference commenced on the 25th of June, 2024 with the research clinic and postgraduate colloquium session. This session was presided over by Prof. K. I. Dandago and attended by the lecturers and the PG students of the Department. The opening ceremony was very colourfully organized and attended by representatives of all invited special guests, other guests, lecturers, and students of the Department and other departments. The opening ceremony was presided over by the representative of Chief Barr. Gebon Kataps, Secretary to Government of Taraba State, and other dignitaries. Prof. K. I. Dandago delivered the paper on the main theme of the conference while the keynote presentation was done virtually by Prof. S. S. Maimako in the morning session of the opening ceremony on 26th June, 2024. In the afternoon session of the 26th June, 2024, Prof. Godwin E. Oyedokun and Assoc. Prof. Naseem Y. H. Allallo who were invited as other guests of the conference presented their papers virtually from America and Iraq respectively. The afternoon session ceremony was chaired by Prof. K. I. Dandago.

Four plenary sessions were created on the 27th of June, 2024, and presenters who had submitted their papers for the conference were grouped into the plenary session presenters. Each plenary session was presided by a professor or an associate professor supported by a rapporteur. On the whole 42 papers were presented both physically and virtually. The closing ceremony of the conference was held in the afternoon of the 27th of June, 2024 and the ceremony was chaired by Dr. Ahmad Baba Muhammad, DVC Academics.

Acknowledgements

The success of organizing a colourful conference by the Department of Accounting, Taraba State University was made possible with the support received from within and outside the University as well as the dedicated team of the LOC. First, we are most grateful to Almighty God for making it possible for the Department to organize its maiden national conference.

We also express our profound gratitude to Vice-Chancellor Prof. Sunday P. Bako and his management team, for the immense support to the successful organization of the conference. We are equally grateful to all the dignitaries who graced the conference most especially Chief Barr. Gebon Kataps (Secretary to Government of Taraba State), the chairman of the opening ceremony; Prof. K. I. Dandago, the lead paper presenter; Prof. S. S. Maimako, the keynote speaker; Prof. G. E. Oyedokun and Assoc. Prof. Naseem Y. H. Allallo, the guest speakers for their invaluable role during the conference. We are indeed highly honoured by your respective contributions to the conference.

In the same vein, we owe a debt of gratitude to the Acting Dean of the Faculty of Management Sciences, Dr. Ibrahim Abdullahi, and his staff for their support during the conference. Finally, we acknowledge and appreciate the contributions of the entire staff of the Department of Accounting and the LOC members for working assiduously for the success of this conference.

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Prof. James O. Alabede, FCA, FCTI, FCIB
Department of Accounting,
Faculty of Management of Sciences,
Taraba State University, Jalingo - Nigeria

Protocol

1. The Chairman of the Occasion, Barr. Chief Gebon Timothy Kataps, Secretary to the Taraba State Government.
2. The Special Guest, Dr. Sarah Nuhu Adi, Commissioner of Finance and Economic Development, Taraba State.
3. The Guest of Honour, Mr. Gaius Danjuma, Accountant-General of Taraba State,
4. The Chief Host Vice Chancellor, Prof. Sunday Paul Bako, Vice Chancellor, Taraba State University, Jalingo;
5. Other principal officers of the University in Attendance
6. Lead Paper Presenter, Prof. Isa K. Dandago, FCA, FCTI, NSE,
7. Keynote Speaker (Who will join the conference virtually). Prof. Seddi S. Maimako, FCA, Former Vice Chancellor, University of Jos.
8. Other Guest Speakers (Who will join the conference virtually):
   a. Prof. Godwin E. Oyedokun of Lead City University, Ibadan
   b. Assoc. Prof. Naseem Y. H. Allallo of Salahaddin University, Iraqi
9. The Host, Dr. Ibrahim Abdullahi, Dean, Faculty of Management Sciences;
10. Dean of other Faculties in attendance
11. HOD of other Departments in attendance
12. EXCO of NUASA and Students of the Department of Accounting
13. and other guests, distinguished ladies and gentlemen.

It is a great honour and privilege to welcome you to the first national conference of the Department of Accounting, Taraba State University, Jalingo. This national conference with the theme "**The Role of the Accountants in Transforming Nigerian Fiscal Space for Achieving Sustainable Economic Development** " is unique and historical in some ways. First, it is historical because it is the first conference to be organised by the Department since its existence. Secondly, it is historical because it is the first conference to be hosted by the Faculty of Management Sciences, Taraba State University, Jalingo.

The conference's theme was carefully chosen to reflect the contemporary challenges confronting the Nigerian fiscal environment. There are three (3) basic components in the fiscal space namely tax revenue, public expenditure, and public debt. The interplay between these components may affect the economic development of a country. For instance, inadequate tax revenue may reduce public spending on defence, education, health, infrastructure, etc. This may result in growth in the public debt profile. Presently, there is no doubt, that Nigeria's fiscal environment is confronting challenges of inadequate tax revenue and mounting public debt. This informed the reason why a committee was established for fiscal reform by President Bola Ahmed Tinubu in 2023. While we await the final report of this committee, the main objective of this conference is to examine the role expected of the Accountants in transforming the Nigerian fiscal environment.

It is for this reason that Prof. Kabiru I. Dandago, Prof of Accounting and Taxation was invited as the lead paper presenter; Prof. Seddi S. Maimako, Prof of Accounting and Finance as the Keynote Speaker and two other guest presenters: Prof. Godwin E. Oyedokun, Prof. of Accounting and Financial Development as well as Assoc. Prof. Naseem Y. H. Allallo. From our point of view, through cross-fertilization of ideas among these eminent scholars and participants from different parts of Nigeria, the objective of this conference will be achieved.

I will not end this address without sincerely appreciating the Chairman of the Occasion; special guest, guest of honour, and all the invited speakers for identifying with our Department and accepting to grace this occasion. We are most grateful to the VC Prof. Sunday P. Bako, who granted approval to the Department to organise this conference and at the same time, provided some financial support for the conference.

On a personal note, as I wind up my tenure as the HOD and sabbatical leave, I want to sincerely thank the VC and his team for the opportunity to contribute my quota to the development of the Department of Accounting and for mentoring young colleagues. We thank LOC members for working assiduously for the success of this conference. Finally, thank you all for coming to grace this opening ceremony. God bless you all.

Lead Paper Presentation

The Role of Accountants in Transforming Nigerian Fiscal Space for Achieving Sustainable Economic Development

Prof. Kabiru I. Dandago **PhD, FCA, FCTI, FNAA, FNIM, FFAR, ACS, MNES, AQIF, MBEN-Africa**

Department of Accounting,
Bayero University, Kano –Nigeria

Introduction

- The ***fisc*** is like a basket, giving an image of a public treasury, which collects public funds and from where public expenditures are incurred to provide public goods in the form of social amenities for the general public.

- Fiscal Policy, which is about the government policy that attempts to influence the direction of the economy through changes in government revenue derive or government spending, is one of the twin policies of government that ensure development of an economy.

- The other policy is the Monetary Policy, which is about the government policy on money/currency production, supply and circulation in an economy.

- Each of the two policies demands continuous reforms and transformations for ensuring sustainable development in an economy.

- Fiscal transformation typically consists of taking measures to bring about a balanced budget position, lower taxes to increase disposal incomes, spending cuts or smaller sized government to save funds for executing developmental projects, preferring tax increase to borrowing, ensuring free trade to encourage production, and ensuring a free market.

- Positive fiscal policy reform or transformation is about ensuring effectiveness in the management of the Treasury and, by extension, ensuring effective public financial management (PFM).

- The key PFM areas, which are all related to the ***fisc,*** are: revenue management, expenditure management, debt management, investment management and wealth management.

- This presentation highlights the fiscal policy measures to be taken by governments for continuous transformation of the Treasury, especially in respect of revenue collection and management system, as well as expenditure and investment management system for ensuring sustainable development in a economy.

- The presentation also highlights the PFM performance measurement pillars, indicators and dimensions which the Institute of Chartered Accountants of Nigeria (ICAN) uses to index the overall annual PFM performance of each SG in Nigeria as well as the FGN, beginning from the 2017 fiscal year to date.

- It also highlights the role of Accountants in Transforming Nigerian Fiscal Space for Achieving Sustainable Economic Development, as they discharge their professional responsibility.

Transformation in Revenue Derive

- Government at all levels (FG, SGs and LGs) must have their revenue generation and collection agenda developed around setting reasonable target on Internally Generated Revenue (IGR) which will ensure that all the Agencies responsible for collection of all forms of revenue are up to their responsibilities.

- As part of Fiscal Transformation, the status of each tier of government must be changed from oil-revenue dependent economy to IGR-based economy.

- Relevant revenue generation laws are to be enacted by the Governments, with a lot of inputs from the relevant Ministries and other stakeholders, with a view to enhancing the Revenue base of the governments.

- All traditional sources of revenue collection to the government (PIT, CGT, CIT, PPT, WHT, VAT, etc.) must be made effective for massive revenue generation and collection into the ***fisc.***

- Firms and individuals must be sensitized about the importance of Taxation, which is the most durable source of revenue to government, and the need for all prospective taxpayers to accept it as the bedrock for achieving sustainable development.

- Governments (FG, SG and LG) to embark on massive projects execution, using their limited resources, so as to convince prospective taxpayers about their determination and commitment to ensuring service-for-tax, rather than verbal promotion of tax-for-service in ensuring economic development.

- Non-traditional sources of revenue to the ***fisc*** of the government (such as grants, donations, PPP investment, etc.) should also be emphasized as part of the transformation in Revenue Management.

Transformation in Expenditure Management

- There is need to ensure Transparency, Accountability and Prudence in incurring public expenditure, as per the provisions of Financial Regulations and the Fiscal Responsibility Act/Law.

- Releases of funds from the Treasury to incur expenditure approved by appropriate authorities must be done with high sense of responsibility, transparency and accountability.

- Each government (FG, SG or LG) must ensure that no funds are released from the Treasury for any project (short term or long term) without proper approval and authorization, based on enacted appropriation law of the Parliament (HoA or National Assembly).

- At each tier of government, quarterly report on expenditure incurred must be made available in good time by the authorities in charge of the Treasury for quarterly budgetary performance assessment to be conducted in conjunction with the Ministry of Planning and Budget at the Federal or State level.

- Each government must ensure that audit queries raised by the Public Accounts Committee (PAC) of the Parliament on the expenditure incurred are answered in good time by all MDAs.

- Timely publication of annual financial reports, in accordance with the provisions of IPSAS Accrual-basis Accounting Standard must be ensured and the printed reports distributed to all stakeholders, in good time.

- The reports are also to be posted to various websites of the Federal, State or local government.

- Staff in the Final Accounts Department are to be subjected to training and re-training in the areas of computer based accounting applications, as well as in the area of applied practical IPSAS accrual basis.

- There is need for proper linkage to be established between Ministry of Finance (MOF), Ministry of Budget and Planning (MOB&P), Office of the Head of Civil Service and Office of the Auditor General and other Stakeholders for transformation of Expenditure management to effectiveness.

- In line with the intent of successful compliance with requirements of migration from **IPSAS Cash Basis** to **IPSAS Accrual Basis**, the Ministry of Finance must ensure development of **Assets Register** and **Valuation of Fixed Assets** belonging to the

Government, so that appropriate depreciation policy could be applied on each asset for the determination of its net book value at the end of each financial year .

Transformation in Debt Management

- There is need for a well functional Debt Management Unit (DMU), well equipped with Computers, Printers, Scanners, Server and Solar Powered Electricity, among others at all levels.
- The Unit is to be responsible for all requests/queries on data related to the indebtedness or liabilities of the government.
- Each government must make timely ascertainment (preferably quarterly) of its indebtedness or liabilities for reporting to appropriate stakeholders and for comparison with the position of other governments (SG or FG).
- The DMU at the SG level must conduct debt sustainability analysis on all the debts incurred by the SG to establish its indebtedness, so as to ensure that the SG's debt profile is not beyond the optimum level.
- The DMU at the SG level must also be conducting satisfactory analysis on all Intervention Funds obtained by the SG (Salary Bailout, MSMEs Loan scheme, Power Intervention Loan and Infrastructure loan, etc.) for proper guidance on how the SG should be servicing them.
- Bond Issuance (Conventional or Islamic) would be a veritable way of capital mobilization for the execution of various developmental projects, if subscribers realize that a SG is not heavily indebted.
- Staff of the DMU must be continuously subjected to trainings on Debt Management issues, especially as such trainings are being provided by many development partners on Debt Management, like the West African Institute of Financial and Economic Management (WAIFEM).

Transformation in Investment Derive

- Through the activities of its Investment wing (the State Investment and Property company or MOFI), each SG or LG must take measures to mobilize the good people of the State or LGA to be visibly present in the Nigerian Capital Market and beyond.

This should be done through the avenue of sensitization seminars or Town Hall Meetings to be organized for all prospective capital market investors in the state.

- Arrangement should be made to highlight all the investment potentials identified in each of the Local Government Areas of the State for local investors to invest in, before other investors are invited from within or outside the country.

- The FG and SGs, through some PPP arrangements, must consider embarking on the construction of low-cost one-bedroom, two-bedroom and three-bedroom houses at a reasonable prices with a view to narrowing the Housing deficit at various levels.

- FG, SGs and LGCs must spearhead search for intervention funds for the use of Micro, Small and Medium scale Enterprises (MSMEs) for their growth, so that they are used as bedrock for achieving sustainable economic development.

- Efforts must be made to meet the requirements for securing such intervention funds from all sources available.

- The FG and SGs must appreciate the fact that poor Domestic Direct Investment (DDI) and Foreign Direct Investment (FDI) are the main problems hampering the fast industrialization and sustainable development of the country.

Transformation in Wealth Creation

- Governments at all levels (FG, SGs and LGCs) must make tangible efforts to create wealth and to ensure effective management of the wealth in a number of ways, which are proposed below:

a) Measures must be taken to ensure the conversion of the Nigerian economy from Oil-Revenue-based to productivity-based or tax-revenue-based in order to put the country on the path to wealth creation.

b) Measures must be taken to ensure the growth of Nano to micro, Micro to small, small to medium and medium to large scale enterprises/businesses for job creation and revenue generation in the country.

c) Measures must be taken to create gainful and active jobs, through the proliferation of PPP projects like the construction of low-cost houses across the country, to narrow the housing deficit and to provide employment and other economic benefits in the process.

d) Measures must be taken to attract support from bilateral and multi-lateral organizations in the form of Aids, Grants and other interventions so as to facilitate the process of wealth creation in the country.

e) Measures must be taken to seek for or follow up various intervention funds from the World Bank, Islamic Development Bank, African Development Bank, French

Development Agency, other development partners, etc. to pave ways for the execution of many developmental projects that amount to wealth creation, in many ways.

ICAN-AI: A Fiscal Transformation Assessor

- The Institute of Chartered Accountants of Nigeria (ICAN) has developed an Accountability Index (AI), called ICAN-AI, which serves as a mechanism for assessing Public Financial Management (PFM) in general, and Fiscal policy and transformation in particular.

- It is an instrument for evaluating the Accountability, Prudence and Transparency levels of all the three-tiers of government in Nigeria.

- It is born out of the need to institutionalize or strengthen Accountability and Transparency in the management of public funds, being the starting point for ensuring effective governance at all levels in Nigeria.

- It is the general belief in Nigeria that weaknesses in Accountability, Prudence and Transparency are the main causes of poor governance, leading to stunted growth and development in every sector of the Nigerian economy.

- Nigeria is perceived to be very far from where it ought to be as a nation, as the country continually experience poverty, inequality or inequity, insecurity, high inflation, unemployment, deplorable infrastructure, among other social ills.

- If Accountability, Prudence and Transparency are well institutionalized and strongly adopted in managing public funds, it is hoped that Nigeria would make headways, since the country is blessed with all the human and natural resources to achieve sustainable growth and development.

- One of the ICAN's contribution towards transforming fiscal space and reforming the whole PFM and ultimately achieving sustainable development in Nigeria is the development of ICAN-AI Framework and the conduct of annual PFM performance assessment on the FG, all the 36 SGs, and all the 774 LGCs in Nigeria.

- ICAN-AI Framework is designed to test the fiscal transformation initiatives by the FG, each SG and each LGC on all aspects of revenue, expenditure, indebtedness, investment and wealth creation.

- The framework has its Pillars (5), Indicators(25) and Dimensions(73) which the Assessors (2 per state) evaluate on evidence-basis before passing decision on compliance with the requirements of each Dimension.

- There is one Coordinator for each of the six-geopolitical zones in the country, making up a total of 78 field workers (all of them Chartered Accountants) who ICAN commissions annually to do the assessment.

- Again, the ICAN-AI Framework has a Steering Committee of 22 members (including the secretariat staff), who have been meeting and retreating to ensure that everything goes well from the beginning of the assessment to the end.

- At the end of the annual assessment, ratings are made on the performance of the FG and all the 36 SGs, subsuming LGCs under the SGs they are answerable to.

5Pillars:	**25 Indicators**	**73 Dimensions**
1. Policy-based Fiscal Strategy and Budget:	5	14
2. Budget Credibility:	6	11
3. Management of Assets and Debts:	3	11
4. Control in Budget Execution, Acctg & Reporting:	8	24
5. External Audit & Legislative Scrutiny:	3	13
TOTAL	**25**	**73**

- Above are the Pillars for the ICAN-AI Framework, highlighting the number of Indicators and Dimensions under each Pillar.

- The assessment is being conducted on questions bordering on each of the 73 Dimensions, as they aggregate back to the Indicators and, finally, back to the Pillars.

- **Indicators under Pillar 1: Policy-based Fiscal Strategy and Budget**

1. Macroeconomic and fiscal forecasting

2. Fiscal strategy

3. Medium-term perspective in expenditure budgeting

4. Budget preparation process

5. Legislative scrutiny of budgets

- **Indicators under Pillar 2: Budget Credibility**

6. Total expenditure implementation

7. Revenue generation

8. Budget documentation

9. Government operations outside budget

10. Public access to fiscal information

11. Local governments aggregate budget implementation

- **Indicators under Pillar 3**: **Management of Assets and Debts**

12. Public investment management

13. Public asset management

14. Debt management

- **Indicators under Pillar 4: Control in Budget Execution, Accounting and Reporting**

15. Salary payroll controls

16. Pension controls

17. Procurement

18. Internal audit

19. Account reconciliation

20. In-year budget reports

21. Annual financial reports

22. Local government annual financial reports

Indicators under Pillar 5: External Audit & Legislative Scrutiny

23. External audit

24. Legislative scrutiny of audit reports

25. Local governments external audit

Performance Ranking by ICAN-AI

ICAN-AI Framework uses evidence-based responses to questions on all the 73 Dimensions for scoring and ranking all the 37 entities under assessment.

- For the 2017 Fiscal year: Kaduna State was 1^{st}, Jigawa State 2^{nd}, FGN $3^{rd,}$ Kebbi State 4^{th}, and Abia State 5th.

- For the 2018 Fiscal Year: Kaduna State was 1^{st}, Enugu State 2^{nd}, Jigawa State $3^{rd,}$ Niger State 4^{th}, and Kwara State 5^{th}.

- For the 2019 Fiscal Year: Jigawa State was 1^{st}, Kaduna State 2^{nd}, Edo State 3^{rd}, Niger State 4^{th}, and Taraba State 5^{th}.

- For the 2020 Fiscal Year: Jigawa State was 1^{st}, Kaduna State 2^{nd}, Bauchi State $3^{rd,}$ Edo State 4^{th}, and Niger State 5^{th}.

- For the 2021 Fiscal Year: Niger State was 1^{st}, Kaduna State 2^{nd}, Edo State 3^{rd}, Jigawa State 4^{th}, and Bauchi State 5^{th}.

- For the 2022 Fiscal Year: Bauchi State was 1^{st}, Jigawa State 2^{nd}, Niger State 3^{rd}, Kaduna State 4^{th}, and Ogun State 5^{th}.

The last five entities over the 6 years under assessment are as follows, from bottom upwards:

- For the 2017 Fiscal year: Rivers State, Oyo State, Edo State, Adamawa State, and Imo State.

- For the 2018 Fiscal year: Edo State, Adamawa State, Imo State, Delta State, and Taraba State.

- For the 2019 Fiscal year: Bayelsa State, Zamfara State, Nasarawa State, Oyo State, and Ogun State.

- For the 2020 Fiscal year: Rivers State, Sokoto State, Oyo State, Imo State, and Zamfara State.

- For the 2021 Fiscal year: Bayelsa State, Plateau State, Borno State, Anambra State, and Imo State.

- For the 2022 Fiscal year: Plateau State, Imo State, Anambra State, Kano State, Bayelsa State.

FGN Under PFM Assessment

Year of Assessment	Total Score from all Pillars	Info NOT provided	Number of Pillars Failed	Ranking Among 37 Entities
2018	52.6%	35%	3 and 5	3rd
2019	39.6%	61%	2, 3, 4 and 5	10th
2020	33.5%	57%	2, 3, 4, and 5	23rd
2021	39.6%	60%	3 and 5	23rd
2022	37.1%		3, 4 and 5	31st
2023	40.9%		3,4 and 5	30th

- Pass mark is 40% of the total score from all the 5 Pillars of the ICAN-AI.
- Only the first 3 entities: Kaduna SG (1st), Jigawa SG (2nd) and the FGN (3rd) passed the assessment for 2018;
- 9 entities passed the assessment for 2019;
- 19 entities passed the assessment for 2020;
- 21 entities passed the assessment for 2021;
- 28 entities passed the assessment for 2022; and
- 30 entities passed the assessment for 2023.
- On the performance of the 6 SGs in the North-east geopolitical zone, the table below carries a summary of how they faired among themselves over the 6 years of the ICAN-AI PFM performance assessment.

Score Card for Northeast Zone Entities from ICAN-AI

State	2018 Rank : Score	2019 Rank : Score	2020 Rank : Score	2021 Rank : Score	2022 Rank: Score	2023 Rank: Score	Position
Adamawa	34^{th}:14.3%	34^{th}:16.3%	25^{th}:31.8%	13^{th}:49.8%	16^{th}: 49.5%	18^{th}: 51.5%	6^{th}
Bauchi	7^{th}: 29.2%	15^{th}:30.6%	20^{th}:39.2%	3^{rd}:74.3%	5^{th}: 73%	1^{st}: 80.4%	1^{st}
Borno	26^{th}:19.5%	32^{nd}:20.8%	8^{th}: 49%	17^{th}:44.9%	35^{th}: 33.5%	25^{th}: 47.2%	5^{th}
Gombe	30^{th}:17.5%	18^{th}:28.2%	9^{th}: 48.6%	8^{th}:54.7%	22^{nd}: 44.4%	21^{st}: 48.3%	2^{nd}
Taraba	10^{th}:28.6%	33^{rd}:18.0%	5^{th}: 58%	20^{th}:41.2%	24^{th}: 42.5%	31^{st}: 39.3%	3^{rd}
Yobe	26^{th}:19.5%	29^{th}:22.4%	11^{th}:47.3%	11^{th}:50.2%	12^{th}:52.3%	20^{th}: 49.9%	4^{th}

The Role of Public Sector Accountants

- Accountants, as public interest servants, are expected to lead the process of fiscal transformation for the better in the discharge of their fiduciary responsibilities.

- Public Sector Accountants, no matter the professional body to which they belong, are expected to discharge their duties as Budget Officers, Revenue Offices, Final Accounts Preparers, Internal Auditors, Treasury Managers, Investment Managers, External Auditors (from AuG Office), Debt Managers, etc. with high sense of responsibility, honesty, integrity, confidentiality, independence, objectivity, competence, fidelity/loyalty, promise-keeping and due care.

- As they spearhead the process of bringing about positive fiscal transformation measures, they are to bear in mind that their reputation, that of their families, professional bodies, and the accountancy profession are all at stake on the success or failure of the governments through which they serve public interest.

- They are also expected to pursue academic or professional research work to continuously find solutions to the problems of PFM where ever they find themselves as public interest servants.
- Accountants in the public sector must see themselves as the bedrock for achieving positive fiscal transformation and they are to be reasonably blamed for the failure of the planned transformation!

Conclusion

- Making presentation on a whole lot of a Conference theme is not an easy task, especially where we are expecting the conference to come up with means of bringing about positive fiscal transformation for achieving sustainable development.
- It is the hope of this paper that other papers for presentation at the conference will address each of the serious issues raised in greater details, so that the conference communiqué could come up with implementable recommendations for achieving positive fiscal transformation in Nigeria and beyond.
- It is hoped that all the fiscal transformational measures for effective PFM raised in this presentation would get the attention they deserve from public sector accountants and the political leaders who hold the steering of public governance in our dear country (Nigeria).

Keynote Speech
On the Occasion of the 1st National Conference Organised by the Department of Accounting, Taraba State University, Jalingo.

Professor Seddi S. Maimako, Ph.D, FCA, OON
Department of Accounting,
University of Jos, Nigeria.

Chairman of the conference, Barr Gebon Kataps,
Special Guest, Dr. Sarah Nuhu Enoch,
Guest of Honour, Mr. Gaius Danjuma,
Lead Paper Presenter, Prof Kabiru I. Dandago.
Guest Speakers, conference participants, distinguished guests, ladies and gentlemen.

I'm profoundly grateful for the invitation to participate in the conference as a keynote speaker. I commend the department of Accounting for organising and hosting the maiden edition of this conference. As a young department, this is indeed a huge academic feat.

The theme for this conference is 'the role of accountants in transforming Nigeria's Fiscal Space for achieving Sustainable Economic Development." Twenty (20) sub-themes have been listed for discussion in the course of this conference. The United Nations Sustainable Development Goals (SDGs) recognise that to spur economic development, countries must address the issues of hunger, health, education etc. Therefore, the SDGS have been designed as the blueprint to achieve sustainable development. How do accountants come into this economic transformative journey? There is no doubt that accountants play a leading role in promoting financial transparency, accountability and efficient resource management.

1. Promoting Transparency and Accountability
To ensure trust in the fiscal space financial statements should be accurate, reliable and adhere to International Financial Reporting Standards (IFRS).

2. Strengthening Public Sector Financial Management.
The public sector plays a pivotal role in sustainable economic development. This is reflected in the various sub-themes for this conference. Accountants must ensure that public funds are used judiciously.

3. Driving Tax Reforms and Enhancing Revenue
Effective tax policies are critical for generating revenue. Nigeria's tax-to-GDP ratio stands at a low 6.1%, compared to the African average of 16.5% . This gap highlights the need for significant tax reforms. Accountants can design and implement tax policies that broaden the tax base and enhance compliance. The informal sector, accounting for over 65% of Nigeria's economy, remains largely untaxed . Accountants can develop strategies to incorporate this sector into the formal tax system. Additionally, by advising businesses on tax compliance,

accountants help reduce evasion and increase government revenue, which is vital for funding infrastructure and social programs.

4. Facilitating Access to Finance for SMEs

Small and medium-sized enterprises (SMEs) are the backbone of Nigeria's economy, contributing about 48% to the GDP . However, access to finance remains a major challenge. Accountants can bridge this gap by providing financial advisory services that enhance the creditworthiness of SMEs. Accurate financial records and sound financial management practices are essential for SMEs seeking funding. Accountants can assist in preparing financial statements that meet the requirements of banks and investors. By doing so, they enable SMEs to access much-needed capital for growth and job creation.

5. Promoting Sustainable Business Practices

Sustainability is becoming a core component of business strategy globally. Accountants play a key role in promoting sustainable practices through Environmental, Social, and Governance (ESG) reporting. According to a report by the Global Reporting Initiative (GRI), companies with robust ESG practices tend to outperform their peers financially . In Nigeria, accountants can lead the integration of ESG factors into financial reporting. This practice not only enhances corporate reputation but also attracts socially responsible investors. By promoting sustainability, accountants ensure that economic growth is achieved without compromising the needs of future generations.

6. Leveraging Technology for Financial Innovation

The accounting profession is being revolutionized by technology. Tools such as artificial intelligence (AI), blockchain, and data analytics are transforming financial processes. The International Federation of Accountants (IFAC) notes that these technologies enhance accuracy, efficiency, and transparency in financial reporting .

For Nigeria to modernize its fiscal space, accountants must embrace these technological advancements. By leveraging technology, accountants can provide deeper financial insights, improve fraud detection, and streamline processes. This technological adoption is crucial for making Nigeria's fiscal space more resilient and future-ready.

7. Building Financial Literacy and Inclusion

Financial literacy and inclusion are key drivers of sustainable development. According to the World Bank, only 39% of Nigerian adults are financially literate . Accountants have a role in educating the public on financial management, budgeting, and saving.

Moreover, accountants can work with financial institutions to develop inclusive financial products. Financial inclusion ensures that everyone, regardless of socio-economic status, has access to financial services, reducing poverty and promoting economic stability.

Conclusion

Accountants are not merely financial managers; they are architects of economic transformation. Their role in enhancing transparency, driving tax reforms, facilitating SME finance, promoting sustainability, leveraging technology, and building financial literacy is indispensable.

As Nigeria pursues sustainable economic development, the contributions of accountants will be pivotal. Let us embrace our roles with dedication, integrity, and innovation. Together, we can transform Nigeria’s fiscal space and pave the way for a prosperous and sustainable future.
I wish you a successful conference.
Thanks for listening.

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The Conference Communiqués

The conference commenced on 25th June 2024, with the research clinic and postgraduate colloquium, chaired by Prof. Kabiru I. Dandago. This was followed by a colourful and well-organized opening ceremony on 26th June 2024. The opening ceremony was attended by representatives of all invited special guests, other guests, lecturers, and students of the Department and other departments. The opening ceremony was presided over by a representative of Chief Barrister Gebon Kataps, Secretary to the Government of Taraba State. Prof. Kabiru I. Dandago delivered the paper on the main theme of the conference and the keynote was presented virtually by Prof. Seddi S. Maimako in the morning session of the opening ceremony while in the afternoon session, Prof. Godwin E. Oyedokun as well as Assoc. Prof. Naseem Y. H. Allallo who was the other speaker at the conference presented their papers virtually from America and Iraq respectively. The afternoon session was chaired by Prof. Kabiru I. Dandago.

Four plenary sessions were created on the 27th of June, 2024, and participants who had submitted their papers for the conference were grouped into the plenary sessions. Each plenary session was presided by a professor or an associate professor and supported by a rapporteur. On the whole 42 papers were presented both physically and virtually. The closing ceremony of the conference was held in the afternoon of the 27th of June, 2024 and the ceremony was chaired by Dr. Ahmad Baba Muhammad, DVC Academics of Taraba State University. Several observations were noted from the various paper presentations and cross-fertilization of ideas on the theme of the conference by the participants. Noteworthy among these observations are:

1. Presently, professional accounting qualification is not clearly connected to sustainability knowledge, and for this reason; accountants require new additional scientific knowledge to be adequately equipped to play the expected role in the transformation of Nigerian fiscal space to achieve sustainable economic development.
2. Accounting innovation which comprises the development and implementation of technologies, methodologies, standards, and practices aimed at enhancing the efficiency and transparency of public financial management has not been fully embraced by government at all levels in Nigeria.
3. Although some levels of fiscal reform have been undertaken in the last few years in Nigeria which has resulted in the updating of some tax and other related legislations through the promulgation of the Finance Acts, this reform is not deep and comprehensive enough to usher Nigeria's economy to the expected sustainable development.
4. The transformation of the Nigerian fiscal environment may be threatened by resistance to change by the stakeholders, lack of technical capacity by civil servants responsible for the implementation of the changes to be introduced as well as high-level corruption.

5. Revenue performance in Nigeria represented one of the lowest in Africa. Poor revenue performance in Nigeria has been attributed to low tax compliance among taxpayers, inefficient revenue collection mechanisms, revenue collection leakages, and inadequate application of technologies in tax administration particularly at the subnational level.
6. The stakeholders are not involved in the public budgeting process, particularly in the decisions relating to public expenditure. Consequently, public expenditure at all levels of government is not guided by the interests, needs, and aspirations of the stakeholders.
7. Public debt management is not given desirable attention at subnational levels and accordingly, most state governments make decisions to incur public debt without reference to their fiscal capacities most especially the debt sustainability level.
8. Delays in the publication of financial reports at all levels of government and lack of access to such financial reports by stakeholders have eroded accountability and transparency in the domain of public financial management in Nigeria.
9. Audit queries raised on government entities by the Office of Auditor General at both national and subnational levels as part of the post-audit process are not attended to as expected. Similarly, some provisions of statutory laws such as the Fiscal Responsibility Act, Public Procurement Act, etc. aimed at entrenching accountability and transparency in public financial management in Nigeria are often not followed by stakeholders.
10. One of the outstanding contentious issues in the history of inter-government fiscal relationships in Nigeria is the high level of vertical fiscal imbalance. The fiscal relationship which is skewed in favour of the Federal Government is characterized by a high level of vertical fiscal gap and this fiscal relationship does not favour grassroots development.

By the reason of the observations noted in the conference, it is imperative to make the following recommendations to the governments and other stakeholders:

1. Accountants require relevant qualifications outside traditional accounting knowledge to play the expected role in shaping Nigeria's fiscal environment through its transformation to achieve sustainable economic development. The qualifications required include sustainability accounting skills and experiences blended with fiscal policy knowledge. Professional accounting bodies like ICAN, and ANAN have to prepare special programmes as part of their Mandatory Continuing Professional Education (MCPE) programmes to build the technical capacity of their members to enable them to make substantial contributions to the fiscal transformation in Nigeria.
2. Accounting innovation is expected to play a pivotal role in fiscal transformation particularly in the areas of development and implementation of requisite technologies and methodologies for fast-tracking revenue mobilization transformation, optimizing public expenditure transformation, and public debt transformation. In this respect, the government at the national and subnational levels should create a conducive environment for the development and implementation of accounting innovation

particularly the requisite technologies and methodologies for the successful transformation of Nigeria's fiscal space.

3. The fiscal reform to be undertaken by the Nigerian government at all levels should not only be concentrated on the tax revenue as done in the previous reform. Other components of the fiscal policy notably public expenditure and public debt also desire a decisive transformation at all levels of government. To this end, fiscal reform should be undertaken by all levels of government and such reform should be deep and comprehensive.
4. To reduce resistance to any reform to be undertaken in the fiscal space, the stakeholders must be carried along by allowing them to participate and contribute to the reform plan. In addition, the civil servants in charge of the implementation of any reform to be introduced must be properly equipped with the skills necessary for the successful implementation of the reform. Similarly, a high level of transparency is required in any reform to be undertaken in the fiscal environment to reduce the tendency of corruption and build the confidence of the stakeholders.
5. Public revenue management reform is a critical part of any fiscal transformation. Public revenue management in Nigeria must be transformed to provide adequate revenue to the government at all levels. To this end, the tax revenue performance must be drastically improved from less than 10% to at least 15% of the tax revenue-GDP ratio which is the benchmark recommended for a developing economy. To achieve this revenue collection target, all issues hindering effective public revenue management in Nigeria must be addressed and these include improving tax compliance levels by ways of education and orientation of taxpayers as well as strictly applying the provisions of relevant laws imposing sanctions and penalties for non-compliance. In the same vein, the efficiency of the revenue collection mechanism must be enhanced by deploying appropriate technologies, up-skilling the available manpower in revenue offices, and improving accountability in revenue administration at all levels.
6. Public expenditure at all levels of government in Nigeria should be driven by the interests and needs of the stakeholders. To this end, adequate consultation with communities, trade unions, civil society organizations, professional associations, and other relevant stakeholders for their input in the budgeting process particularly for public expenditure is paramount. Such consultation will build the confidence of the stakeholders in the public budget and limit the inclusion of white elephant projects in the budget.
7. Subnational governments particularly the state government should pay attention to the management of their respective public debt. This is imperative so as to ensure that their respective debt profile is not beyond a sustainable level. For states that have not done that, it is crucial to have a public debt management strategy, unit, or team in place and regular conduct of debt sustainability analysis is necessary for effective debt management.

8. It is part of the stewardship responsibility of government at all levels to publish the financial reports within the period stipulated by relevant laws and ensure that such reports are accessible to the citizens and other relevant stakeholders. The government should pay more attention to this statutory responsibility and avoid unnecessary delays in the publication of financial reports. Furthermore, deploying technology in financial reporting will make accessibility to the reports more unburdensome and less costly.
9. The success of any reform in Nigeria's fiscal environment depends absolutely on the level of accountability and transparency entrenched in the reform. Consequently, stakeholders must be sanctioned for any action that is intended to undermine accountability and transparency in public financial management and such action includes failure to respond to audit queries, noncompliance with provisions of relevant statutory laws, etc.
10. Transformation in the Nigerian fiscal environment will be considered to be uncompleted and not comprehensive if the long outstanding issues such as the vertical fiscal imbalance are not addressed. In this context, restructuring the existing fiscal relationship between national and subnational governments by allowing more statutory allocation for the subnational governments is imperative to reduce the high level of vertical fiscal gap between the two levels. Such restructuring would make more financial resources available to the sub-national governments to enable them to handle issues relating to security, provision of more health care, education, infrastructure, etc.

The conference concluded that the holistic transformation of Nigeria's fiscal environment is imperative for achieving sustainable economic development in Nigeria and to do that, the accountants by their professional training have a crucial role to play. However, the transformation to be undertaken in Nigeria's fiscal environment should be comprehensive and it should be extended to all aspects of the fiscal policy including public expenditure, public debt, etc. To get maximum support for the transformation, all relevant stakeholders should be carried alone and involved from the onset of any reform that may result from the transformation. In the same manner, building the technical capacity of the civil servants including the accountants is essential for effective implementation of the various reforms to be initiated in the transformation of Nigeria's fiscal environment. Furthermore, for the transformation to enjoy support from the generality of Nigerians, a high level of transparency and accountability must be entrenched in any reform to be initiated in the transformation.

Finally, the LOC appreciates the contributions of the conference participants. The LOC is particularly grateful to Prof. K. I. Dandago, the lead paper presenter; Prof. Seddi S. Maimako, the keynote speaker; Prof. G. E. Oyedokun as well as Assoc. Prof. Naseem Y. H. Allallo, who was the other speaker for their technical support for the conference.

EXPLORING THE CONNECTION BETWEEN SUSTAINABILITY REPORTING AND FIRM VALUE IN THE PRESENCE OF OWNERSHIP DIVERSITY: A CONCEPTUAL PAPER

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Abstract

Current predictions have suggested that imbalances in natural systems would negatively affect the quality of human life and society at large. This led to the call for management to adopt the current method of reporting to show the level of financial and non-financial performance of organizations. Stock price declines due to non-financial factors is responsible for the positive or negative impact arising from its business activities. However, evidence has shown that listed companies around the world are shifting from short-term goals of maximizing profit to long-term sustainable environmental, socially and governance goals of which ESG performance is contributing towards improvement in both operating and market performance of a firm. Hence, this study is undertaken to explore the connection between sustainability reporting and firm value, giving cognizance to the moderating role of ownership diversity in enhancing the connection. On this ground, this paper argued that the relationship between sustainability reporting and firm value is better enhanced in the presence of ownership diversity. Hence, it proposed models which incorporate the interactive role of corporate ownership diversity in connection with sustainability reporting and firm value.

Key words: Sustainability Reporting, Firm Value, Ownership Diversity

INTRODUCTION

In carrying out their business activities, companies have a goal to make profit to provide prosperity for their shareholders as well as other stakeholders. One indicator of the success of a company that has gone public is reflected in the firm value and the share prices traded on the capital market (Aksan & Gantyowati, 2020). Stock prices decline due to non-financial (social and environmental) factors. Social and environmental issues are an essential concern for a company because it has been proven that many companies fail to maintain firm value due to their negligence in preserving the environment and neglecting the society in which the companies operate. The company is responsible for the positive or negative impact arising from its business activities. One form of corporate responsibility is by expressing and communicating environmental, social and governance performance in addition to the corporate's economic performance to the public.

In today's business world, what guarantees any corporate entity to remain in competition is the recognition it gives to the society in which it operates. A corporate entity with high social value, such as care for the environment, social and governance, and participation in the activities of social responsibility, is anticipated to stimulate sales growth that goes together with an increase in firm value. Therefore, companies are required to be more transparent so that communication with diverse stakeholders could increase (Husseini & Basuki, 2020). Stakeholders are actors (organizations, agencies, clubs, groups, or individuals) who may gain or lose from an organization's activities with interest (stake) in the organization's performance. Stakeholders are defined as "any group or individuals who could affect or is affected by the achievement of the organization's objectives, or as those who have an interest in a particular decision or course of action, either as individuals or as representatives of a group (Dziminska et al., 2020).

Freedman (1984) makes it clear that, apart from investors' interest, successful companies are able to align the interest of all stakeholders. This is because a firm, as an artificial entity and an agent of many others, should have fidelity which is not limited to only shareholders but to the firm and in turn to all stakeholders (Phillips et al., 2003; Rastogi & Singh, 2023). This means that, a corporate firm does not only focus on maximizing profit to suit the interest of the shareholders, but takes into account the interest of other stakeholders of the firm as well.

In addition is the concept of accountability introduced by Elkington (1997) with the term Triple Bottom Line (TBL), which is a balance between people-planet-profit, which came to be known as the concept of sustainability, meaning that accountability to stakeholders is presented in the form of sustainability report. Sustainability reports are measurement practices, disclosures revelations, and responsibility endeavours of the organization's exhibition in accomplishing practical advancement objectives to both internal and external stakeholders (Global Reporting Initiative (GRI, 2013). In recent time, sustainability reporting has been given much attention by policy makers, corporate managers and researchers. Perhaps, this may be due to its importance in disseminating information about sustainability behaviour of corporate entities.

Research findings have indicated that sustainability reporting has impact on various performance indicators of corporate entities such as ROA, Tobin's Q, etc. (Agarwal et al., 2023; Buallay et al., 2023). However, past research efforts have not taken into consideration that there are other corporate factors which could play important role in enhancing the impact of sustainability reporting on performance of corporate entity, particularly its value. One of these factors, which is capable of greatly influencing the impact of sustainability reporting on corporate value, is ownership diversity, particularly managerial ownership and institutional ownership.

Unlike previous research efforts, this paper proposed that the model indicating the impact of sustainability reporting on corporate value should be expanded to incorporate the moderating role of corporate ownership diversity to have better understanding of the role of corporate ownership diversity in the relationship between sustainability reporting and corporate value. The remaining parts of this paper are structured into six parts.

Sustainability Reporting

According to Abdullahi and Makama (2021), the concept of sustainability emerged out of fear of the present and future impact resulting from resource utilization for human development on the environment. The fear in terms of water, land and air pollution, land and resource depletion degradation, and deforestation, have combined and led to a new paradigm for resource utilization aimed at meeting the present human need without compromising the future needs of such resource by the future generation (Abdullahi & Makama, 2021). Sustainability reporting is the act of measuring, disclosing, reporting and being accountable to internal users as well as the external users (stakeholders) for organizational commitment towards achieving the goals of sustainable development. It could also be referred to as the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance toward the goal of sustainable development (GRI, 2018).

However, the concept has been in continuing use by businesses, who term it as "corporate sustainability" to differentiate it from the macro-concept. Despite the lack of clarity as regards to working definition, there are still common concepts used to explain this term. The common concept usually documented is from the GRI, which is the non-financial activities of an organization that are carried out towards actualising sustainable global economy. From the viewpoint suggested by the GRI in recent time, corporate sustainability comprises three pillars: Environmental aspect, Social performance, and Governance performance (Ravi, 2018). In practice, it is known as non-financial information of an organisation in form of Environmental Social and Governance Disclosure or Score (ESG) (Albitar et al., 2020).

As such, in this study, sustainability reporting could be defined as the non-financial activities of an organisation prepared and disclosed to both internal users and external users of corporate bodies. In support of this definition is Delubac (2023), who defined sustainability reporting as 'the disclosure of environmental, social and governance (ESG) goals.'

ESG disclosure helps potential investors to evaluate the behaviour of corporations and also assist in determining the firm's future financial performance. The 'E' (Environmental) refers to climate change, pollution, environmental management and water scarcity among others. 'S' (social) refers to employee relation, community involvement, human rights and the involvement of harmful products or services. 'G' (Governance) represents the policies, practices and rules which firms use to empower themselves.

Buallay (2019), who provided evidence that ESG reporting significantly impacts firm value, highlighted that ESG provides insights into corporate management quality and forecast firm performance. This is to say that ESG disclosure information could be identified through rating and reporting from a company's financial report. The ESG rating is normally analysed based on the publicly available data reported by the companies and governmental organisations annually. This study relies on ESG scores as indicators of sustainability reporting due to the following reasons. Firstly, ESG describes the company's strategic approach in managing sustainability issues. Secondly, ESG is connected to socially responsible investment, which is a well-recognised investment, and experienced rapid growth among investors. Lastly, ESG is known as the extra-financial material information of companies in Corporate Social Responsibility (CSR), environmental, sustainability and corporate governance, which are valuable for investors (Ludwig & Sassen, 2022).

In today's business world, what guarantees any corporate entity to remain in competition is the recognition it gives to the society in which it operates. A corporate entity with high social value, such as care for the environment, social and governance, and, participates in the activities of social responsibility, is anticipated to stimulate sales growth that goes together with an increase in firm value. Therefore, companies are required to be more transparent so that communication with diverse stakeholders could increase (Husseini & Basuki, 2020).

Transparency in communication with diverse stakeholders means absence of information asymmetry, and stakeholders' theory explained that, a company is formed to render services to a group of investors with investment who are expecting returns from the activities of the company. Freedman (1984), makes it cleared that apart from investors' interest, successful companies are able to align the interest of all stakeholders, this is because a firm as an artificial entity and an agent of many others is supposed to have fidelity which is not limited to only shareholders but to the firm and in turn to all stakeholders (Phillips et al., 2003; Rastogi & Singh, 2023). This means that, a corporate firm does not only focus on maximizing profit to suit the interest of the shareholders, but also takes into account the interest of other stakeholders of the firm. Sustainability reporting is the way of reducing information asymmetry between companies and investors (Gavana et al., 2017) as it would end the conflict between shareholders and other stakeholders which include the minority interest shareholders.

Because of the stakeholders' increasing demand for more disclosures, not just on organisations' economic performance but to also include environmental and social practices, managers attempt to attentively scruitinise the repercussion of their operations on planet by answering the call to adopt ESG reporting strategy; this means moving away from just being a profit-maximizing firm as its major goal, but to include ESG conscious entities (Rastogi & Singh, 2023).

Accepting or embracing sustainability as an integral plan of a business model has been a change for firms over time. Although it is widely acknowledged that sustainable ecosystems are becoming a necessary condition for organisational continuity, firms' sustainability reporting trends have not kept pace with addressing sustainability-related issues (Abeysekera, 2022). Sustainability reporting is undertaken to address a heterogeneous assortment of various activities aiming at the ESG reporting of an organization and the larger environment at the same time (Lehner, 2016).

Disclosure of sustainability reports, such as ESG, provides a positive signal to stakeholders regarding the company's future growth and financial position (Arayssi et al., 2019; Fernando et al., 2022). The disclosure of ESG of firm offer opportunities to understand non-financial information of a firm which if done objectively should increase the value of the company. Kumar et al. (2020) revealed that, listed companies around the world are shifting from short-term goals of maximizing profit to long-term sustainable environmental, social and governance goals of which ESG performance must contribute towards improvement in both operating and market performance of a firm. Researchers suggested that, investment in ESG activities is assumed to have an impact on revenues, sales growth efficiency and also a positive gain from stock market of the concerned organisation.

For the benefit of recognition, an increasing number of firms now disclose their ESG activities, as it has become evidenced that ESG reporting has effect on firm performance and, therefore, form part of reports used by investors in economic decision (Annisa & Hartanti, 2021).

Firm Value

Firm value is the appeal to maximise shareholders wealth. As one of the functions of financial management of an organization, corporate entities have the duty to protect the interests of the shareholders as well as that of other stakeholders. One of the principles of accounting concept and convention, the going concern concept, explained that, corporate body is a function of the degree to which an entity could generate value substantially for appropriate stakeholders. Therefore, to maximise the value of firm, agents or managers need to put all resources into maximising the value of the principal for the shareholders (Ravi, 2018).

Firm value is a measure for investors to make a decision on whether to or not to invest in a firm’s shares. If a firm's worth is high, the market would have trust that the firm has performed well and could defend the interests of its shareholders in the future (Oncioiu et al., 2020). For future economic gains, investors invest wealth in the form of stocks, the higher the stock price, the greater the worth of the firm and this indicates the firm's future prospects (Rezaee, 2019).

Corporate Ownership Diversity

Ownership diversity is the number of companies shares held by different individuals or organisations. In this study, ownership diversity is the number of shares owned as regards to distribution of equity capital as well as identity of the owners in an organisation. Walsh and Seward (1990) and Gillan (2006) believed that, when ownership is dispersed, shareholding control tends to be weak because of poor shareholder monitoring. Organisations with a small size of shareholders may likely not be interested in monitoring because they would bear all the costs of monitoring; this may consume the small proportion of the benefits. Hence, they may not be interesting in monitoring of managerial efforts. At the same time, dispersed ownership lacks both the means and the motive to address managerial agency problems. In jurisdictions with dispersed ownership, in which principals are typically both unwilling and unable to act as effective monitors, the market controls are the primary controlling forces that keep managers in check (Madhani, 2019).

However, when ownership of a company is concentrated, large shareholders would play an important role in monitoring the management (Zhuang, 1999). Corporate governance, therefore, believes much on the inside structures rather than it does to structures from external. Corporate board and insider ownership (promoter ownership) are two important internal corporate governance structures in every business arrangement, evidence from study of Kumar and Singh, (2013) from India. Apart from the board of directors, managerial ownerships are found to also play an important role in organisational setting. In addition, is the presence of institutional ownership as evidence has shown that institutional ownership provides supervision and intervention in the company’s decision-making process by providing beneficial information which could impact the firm value. Institutional ownership as one of the components of ownership diversity, its inclusion in a company implies that, the company’s management is practicing good corporate governance, which can increase the value for all stakeholders (Budiyono & Wulansari, 2018; Dihardjo & Hersugondo, 2023).

Sustainability Reporting, Firm Value and Ownership Diversity

Past research on the role of sustainability reporting on firm value that has been carried out has been consistent in developed countries because they have a sound stakeholder protection system or stakeholder-oriented countries (Setiadi, 2016). But in Nigeria, similar researches are still inconsistent. Some scholars (Imperial et al., 2023; Korkmaz & Nur, 2023; Sreepriya et al., 2023) documented positive impact while others (Buallay et al, 2023; Friske et al, 2023), documented negative impact. Some others (Almaqtari, et al, 2022; Giannopoulos et al, 2022) reported mixed effect.

Thus, since result outcomes from various researches on sustainability reporting and firm value come without consensus, it becomes worrisome for managers to make honest and ethical choices while taking decision and responsible for certain financial outcome. This calls for the introduction of ownership diversity. And researchers have agreed that ownership diversity (managerial and independent board ownership) does have effect on firm value (Riyadh et al., 2022; Sa'diyah & Hilabi, 2022; Usman &Yahaya, 2023; Zhu & Wu, 2023).

Previous studies on sustainability reporting and firm values

This section provides evidences capturing related studies on Sustainability (ESG) reporting and firm value.

Empirical evidence reported from developed economies are quite evident, highlighting the relevance of the impact of ESG activities on firm value. These could be seen from the works of Agarwal et al. (2023), Kim and Lee, (2023), Imperiale et al. (2023), Buallay et al. (2023), Almaqtari et al. (2022), Aydogmus et al. (2022), Asika (2022), Fabian et al. (2022), Onyemaechi (2022), Thomas et al. (2021), Husnaini and Basuki (2020), among others. These studies provide evidence that ESG reporting significantly impacts firm value, and highlighted that ESG provides insights into corporate management quality and forecast firm performance.

Agarwal et al. (2023) conducted a study on the impact of environmental, social, and governance activities on the financial performance (FP) of Indian health care sector firms with competition as a moderator. The study found that there is a significant negative association between ESG and FP. It was also found that when competition is used as a moderator, the result significantly and positively impacted on the ESG and FP of the healthcare companies.

Buallay et al. (2023) conducted a study to investigate the relationship between the level of sustainability reporting of banks and financial services' performance across seven different regions, using 4,458 observations from 60 different countries for 10 years (2008–2017). ROA, ROE and Tobin's Q (TQ) were the proxies for the dependent variable, while ESG scores was used to proxy sustainability with control variables from both bank and country indicators. The findings showed significant negative relationship between ESG and operational performance (ROA), FP (ROE) and market performance (TQ) for the whole sample.

On the contrary, Korkmaz and Nur (2023) conducted a study to examine the relationship between ESG scores and firm performance and whether firm size and age moderated the relationship of six banks listed in the BIST Bank Index from 2013-2021. Panel data analysis carried out found a statistically significant and positive correlation between ESG scores and firm performance. The study concluded that safe activities into ESG would have positive influence on firm performance.

Imperiale et al. (2023) conducted a study on sustainability reporting and ESG performance in the utilities sector. The study aimed to contribute to the debate about the nonlinear relationship between sustainability reporting quality and ESG performance. Analysis was conducted using a panel data approach of which the result revealed that the environment positively influences sustainability reporting and ESG.

Aydogmus et al. (2022) studied the impact of ESG performance on firm value and profitability of 1,720 listed companies from Bloomberg database Istanbul for a 10-year period from 2013 to 2022. The study used Tobin's Q, and Return on Assets (ROA) (dependent variable) to measure firm value and profitability respectively while the independent variables were measured as the ESG combined score, and ESG scores. The study found that ESG combined score has a positive and highly significant relationship with firm value.

Naeem et al. (2022) investigated whether the ESG performances of corporations from environmentally sensitive industries affect their financial performance. The study finding proved that combining effect of ESG performance is positive and significantly related with the company’s return on equity and Tobin’s Q. Additionally, developed countries tend to have strong environmental sensitive association on their financial performance than does in the developing countries. The limitation is on the use of ESG combined scores, ESG individual score and ESG combined controversial scores. The researchers could not state in clear terms their differences, as such the result tend to have issue of multicollinearity.

Onyemaechi (2022) examined the emerging corporate reporting perspectives and operational performance of listed oil and gas firms in Nigeria adopting a mixed research method using both correlation and causal research design in analysing the data of the seven sampled listed oil and gas firms for 10 years from 2011-2020. Findings of the study indicated that a positive but weak association exists on sustainability disclosure and sales performance of oil and gas companies in Nigeria.

Husnaini and Basuki (2020) conducted a study to test empirically whether the ASEAN Corporate Governance Scorecard has a positive effect on sustainability reporting and whether the ACGS and sustainability reporting have a positive effect on firm value. The empirical investigation proved that, all hypotheses developed for the study were found to be in the opposite direction, meaning that all the study variables were found to have negative and significant association with each other.

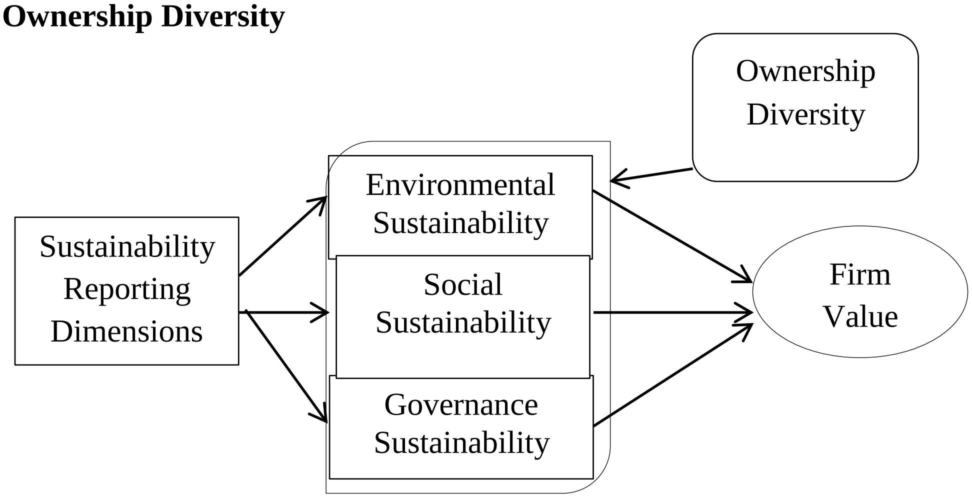
From this review, it could be seen that previous studies did not give consideration to the role corporate ownership diversity, particularly managerial ownership and institutional ownership, could play individually and jointly in enhancing the impact of sustainability reporting on corporate value despite empirical evidence suggesting that ownership diversity affect corporate value (Bazhair & Sulimany, 2023; Bogamuwa & Perra, 2021). This paper, therefore, proposes sustainability reporting model on corporate value, and incorporates the interacting role of ownership diversity as conceptualised below.

Model Proposal

A Conceptual Model of sustainability reporting and firm value

The model presented in Figure 1 assumes that sustainability reporting and firm value is better enhanced in the presence of ownership diversity. There are, however, major conditions for this logical framework to be valid. Management of organizations must realize the need of stakeholders and the actions taken must be of appropriate quality in terms of reporting and value enhancement. The role of ownership diversity is key due to their expertise and professional role in enhancing sustainability reporting impact on corporate value. This means that they have within their locus of control such as to measure that organization provides rules that would take care of environmental protection, adequate provision is made to tackle issue of human capital utilisation and adequate corporate governance structure design was adopt by management to have a lasting effect on environmental, social and governance aspects of sustainable development. It is the assumption that the authors of this model make that if an entity is penetrated with the widespread of ownership diversity, where the mission advocates sustainability then by using its main modes of operations while being the role model themselves, it would better enhance firm value.

Figure 1: Connection between Sustainability Reporting and Firm Value in the presence of Ownership Diversity



Source: Modified by Researcher

CONCLUSION

The study concluded that, sustainability performance as suggested in the Brundtband Report of 1987 should be assessed based on environmental and social value added to stakeholders in much the same way as corporate economic value is added to them. Based on the findings of the research performed, the finding of this study could be inferred as follows: Firstly, sustainability reporting has a significant impact on firm value of corporate entities. Secondly, ESG activities have significant and positive association with firm value, while in some cases, it is found to have a significant and negative association with firm value. Lastly, the finding also proved that, ownership diversity has a positive correlation with sustainability reporting and firm value.

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IMPACT OF FINANCIAL RISK MANAGEMENT ON PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study examined the impact of financial risk management on performances of Deposit Money Banks in Nigeria using a quasi-experimental design. This approach investigated how an independent variable, which participants possessed before the study began, affected a dependent variable, thus employing an ex-post facto design. As of December 31, 2022, the study population included all Deposit Money Banks listed on the Nigerian Exchange Group (NGX) over the past 13 years *(2010-2022). The sample size consisted of 10 Deposit Money Banks, randomly selected from those listed on the Nigerian Exchange Group as of December 31, 2022. The study utilized panel data with statistical information, analysed using STATA (version 17), which is well-suited for panel data analysis. Panel data regression analysis was employed to test the research hypotheses. The findings indicated that both credit risk and liquidity risk significantly impact the financial performance (ROE) of Nigerian Deposit Money Banks. The study concluded that financial risk negatively affects the financial performance of these institutions. The study recommended that Management of Nigeria's Deposit Money Banks should aim to minimize losses from bad debts and other relevant credit fees while maintaining an adequate level of overall and liquid assets. It was also recommended that devised strategic plans should be put in place to attract sufficient deposits to support their operations.*

Keywords: Deposit Money Banks, Financial Risk, Financial Performance

INTRODUCTION

Deposit Money Banks (DMBs) play a crucial role in the Nigerian financial system, mobilizing deposits and providing credit to support economic growth and development. However, the performance of DMBs is inherently linked to various financial risks, including credit risk, liquidity risk, operational risk, and market risk. This paper aims to analyze the impact of financial risk on the performance of DMBs in Nigeria, with a focus on identifying key risk factors and their implications for bank profitability and stability.

To balance the surplus and deficit units of the economy, DMBs transfer deposits from surplus units to deficit units through loans and other financial services (Mamman & Hashim, 2014). Due to the complexity and scale of their operations, DMBs are exposed to various risks, including financial, operational, market, and reputational risks, which, if not properly managed, could threaten their revenue generation, reputation, and overall sustainability (Central Bank of Nigeria (CBN, 2019). To fulfil their financial intermediation role, DMBs must navigate multiple financial risks. Oldfield and Santomero (1997) described financial risks as the various types associated with financial transactions. These risks include numerous factors whose severity determines the potential financial loss a bank might face, potentially causing volatility in a bank's reserves, costs, and corporate value. Specific risks include Credit/Default Risk (the risk of debt default), Insolvency Risk (the risk of being unable to meet obligations), Liquidity Risk (the risk of not meeting short-term obligations), and Market Risk (the risk of losses from unfavourable price movements in treasury positions) (Ajayi & Oseyomon, 2019).

Effective financial risk management is crucial for a bank's profitability, solvency, and sustainability, as inadequate risk management could adversely affect these areas. Muriithi and Muigai (2017) highlight that financial risks threaten the financial sector's stability and overall performance. In Nigeria, financial risks and DMBs financial performance are contentious and unresolved issues, characterized by low profitability, sustainability concerns, inability to create economic value for shareholders, and poor returns on assets due to inefficient asset utilization (Clementina & Isu, 2016).

Financial risk management is particularly challenging, with Olalere et al. (2018) noting that financial risk is both systemic and asymmetrical, negatively impacting banks' financial and non-financial performance, causing significant losses, and undermining investor and depositor confidence. John (2020) describes a risk management framework as a set of components forming the conceptual and organizational basis for developing, implementing, monitoring, reviewing, and continuously improving risk management across an organization. Effective financial risk management framework should align with an organization's operational policies and strategic planning to facilitate decision-making and goal achievement. Pandey (2014) argues that successful risk management does not require eliminating inherent risks, as banks could profit from taking risks by charging interest, such as the inherent credit risk associated with providing loans. Imola (2017) suggests that banks should only take on financial risks when necessary to achieve substantial profits.

However, risk management has not significantly improved financial performance in Nigeria's financial system due to issues like poor judgment, insider loans, insensitivity to economic and environmental trends, and inadequate risk management policies (Christopher, 2019). Nigerian banks have a tradition of providing loans and advances to friends, relatives, politicians, and corporate directors without proper appraisals, leading to bad debts and financial distress due to inadequate recovery procedures. Imola (2017) further notes that bank management's neglect and ignorance of regulatory frameworks and standards exacerbate these risks. Some management and employees in Nigerian banks either lack awareness of banking risks or disregard regulations designed to prevent losses. Hoseininassab et al. (2018) state that risk management should not operate in isolation. Given that banks are important to the Nigerian economy, their risk management practices warrant thorough investigation, as risk is a factor that could influence a business's effectiveness and profitability. The primary objective of this study is to determine how financial risks impact Nigeria's DMBs' financial performance.

LITERATURE REVIEW

This section explores the theoretical underpinnings of the study, focusing on the concepts of risk, financial risk, and financial performance. It also discusses the empirical review of previous studies on financial risk and performance.

Concept of Financial Risk

Financial risks arise from various sources, one of which is loan repayment defaults, leading to non-performing loans (NPL) for banks. These risks are among the most significant and challenging for banks as they fulfil their operational duties (Mostafa et al., 2016). Financial risks encompass credit, liquidity, market, and insolvency risks. Additionally, financial transactions may involve interest rate risk, currency risk, and business risk (Ghenimi et al., 2017). DMBs must implement policies to manage the multiple risks they face. While all financial risks are important, credit and liquidity risks are crucial to their daily operations, as most other risks could be transferred to consumers without significantly affecting the bank's financial stability. The relationship between credit and liquidity issues greatly impacts a bank’s profitability. Businesses expose themselves to various commercial and financial risks when investing, depending on the financial instruments used (Yimka et al., 2015). Potential financial risks include market volatility, bankruptcy, rising inflation, and recession. Tsevisani (2017) emphasizes that understanding human behaviour in dynamic environments and in the presence of risks is essential for effective risk management.

Management of Financial Risk

Financial risk management is a systematic approach to analysing, evaluating, and addressing financial risks, which enhances the likelihood of achieving goals and ensures the sustainability of businesses, individuals, and communities. Effective risk management requires a thorough understanding of relevant dangers, assessing their significance, and a systematic monitoring and control strategy. Identifying, evaluating, and taking preventive measures to mitigate potential losses are crucial in risk management. The primary objective of financial risk management is to reduce risk. According to Res et al. (2016), risk management involves steps to set the context, recognize and assess deviations, monitor, and alert personnel to risks, thereby continuously improving decision-making. In the financial sector, risk management aims to develop strategies to reduce risk and monitor the bank's risk profile (Soyemi, 2019). Researchers, such as Oluwafemi et al. (2018), Kambi and Ali (2016), Stephen and Akele (2014), Yusuf (2019), Ghani (2015), Res et al. (2016), and Olamide et al. (2015), highlight the importance of risk management in determining banks' overall profitability.

Liquidity risk pertains to a bank's ability to make timely payments on its debts or invest in asset expansion when necessary (Yusuf, 2019). Both resource shortages and surpluses of underutilized resources pose liquidity risks. Effective gap analysis and management in banks require maintaining a reasonable fit between the average maturities of sources and uses of funds (Christopher, 2019). Credit risk, or the risk of late loan payments, must also be managed by banks. Credit risk occurs when a borrower is unable or unwilling to meet its obligations (Anthony & Shanise, 2018). Factors contributing to credit risk include a lack of non-executive directors, lax credit assessment practices, poor lending practices, insufficient capital and liquidity, directed lending, extensive bank licensing, subpar loan underwriting, reckless lending, and poor credit assessment (Yimka et al., 2015). Other external risks include inflation risk, market risk, exchange rate risk, and political risk.

Financial Performance

Financial performance refers to a company's ability to generate new resources from its daily operations over a specific period. This performance is typically measured by net income and cash flow from operations. Toutou and Xiaodong (2011) define financial performance as a general measure of how effectively a bank generates revenue from its capital, reflecting the bank's overall financial health over time. This metric allows for the comparison of different banks within the industry. Stability and profitability are key components of financial performance, where stability pertains to risk factors and profitability to financial returns. According to Shoukat and Nadeem (2014), financial performance (FP) is a subjective measure of a firm's efficiency in using its assets to generate revenue from its core business activities.

Evaluating the financial performance of DMBs involves various indicators, including Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), and Earnings per Share (EPS) (Bagh et al., 2017). ROA, calculated as net income divided by total assets, indicates how effectively a company's management uses its real investment resources to generate profits. It is a widely used metric for comparing the efficiency and operational performance of companies, reflecting the returns generated from the company's asset investments. ROA, defined as earnings before interest and taxes (EBIT) divided by total net assets, assesses a company's efficiency in using its assets to generate income before fulfilling contractual obligations. Akong'a (2014) notes that ROA, also indicates the capital intensity of the banking industry, with industries requiring significant initial investments generally showing lower ROA.

Another critical profitability measure is ROE, which shows how effectively a company's management turns shareholders' funds into net profit. This ratio represents the rate of return flowing to the company's shareholders, highlighting the management's efficiency in generating profits from the equity invested by shareholders.

Empirical Review

Empirical research has extensively examined financial risk management and the performance of deposit money institutions. Amelia (2017) reviewed empirical evidence on the profitability of Nigerian banks and financial risk management using an ex-post facto research design to analyse data from 14 DMBs. The findings indicate a significant inverse relationship between credit risk and ROA, while capital adequacy risk and liquidity risk show a significant positive relationship with ROA. Proper management of liquidity and capital adequacy risk increases the likelihood of profitability for full-service banks.

Several studies have explored the relationship between financial risk and financial performance in the banking sector globally. However, there is a limited body of literature specifically focused on Nigeria DMBs.

Annor and Obeng (2017) assessed the impact of credit risk management on the profitability of selected commercial banks listed on the Ghanaian Stock Exchange. Secondary data was sourced from the annual reports of the six selected banks and Ghana banking survey for the year. The study adopted the Random Effect Model within the panel estimation technique framework. ROE proxy was used to measure profitability of banks, while non-performing loans, loan loss provisions ratio, loan to asset ratio and capital adequacy ratio were used as proxies for credit risk. Their results showed that indeed credit risk management have significant relationship with the profitability of banks, while capital adequacy ratio had positive relationship with the sampled banks' profitability; non-performing loans, loan loss provisions ratio and loan to asset ratio show statistically significant negative relationship with the profitability of the sampled banks.

Nisrul and Azhar (2017) study the impact of risk management and bank size profitability of 30 quoted commercial banks in Indonesia from 2011-2015. The study investigated whether CAR, NPL and Size would give an effect to the profitability of the banks. Panel data regression analysis was used to analyse data. The result showed that there is a positive and significant effect of CAR toward banks' ROA. NPL had a negative but insignificant effect toward ROA. Firm size had a positive and significant effect toward ROA.

Sathyamoorthi et al. (2019) investigated the impact of financial risk management practices on the financial performance of 10 commercial banks in Botswana for the period of eight years from 2011 to 2018. The study used ROA and ROE to measure financial performance. Inflation, Interest rates, total debt to total assets, total debt to total equity, total equity to total assets and loan deposit ratios were used as proxies for financial risk management. The descriptive study sourced monthly secondary data from Bank of Botswana Financial Statistics database. Descriptive statistics, correlation and regression analyses were applied to analyse the data. The results from regression analysis showed that interest rates had a negative and significant impact on ROA and ROE. It was also revealed that, total debt to total assets showed a negative and insignificant effect on ROA. Total debt to total assets revealed a positive and insignificant effect on ROE. The loan deposit ratio indicated a negative and significant impact on ROA and on ROE. Findings suggest that banks should strike a proper balance between financial risk management practices and financial performance by engaging in appropriate market, credit, and liquidity risk management practices that would ensure safety for their banks and yield positive profits.

Onyefulu et al. (2019) ascertained the relationship between financial risk and performance of DMBs listed on Stock Exchange of two selected West African countries using a sample of 20 DMBs. Their study covered a period of 10 years spanning from 2009 to 2018. Ex-post facto research design was employed and secondary data was collected and subjected to multiple regression and correlation analysis to achieve the study's objectives. Financial risk, which is the independent variable, was measured by liquidity risk, operational risk and interest rate risk, while dependent variable, which is financial performance, was measured by ROA and ROE. The result of the study revealed that liquidity risk has negative and significant effect on performance of banks in both Ghana and Nigeria; while ROE has the negative effect of credit risk on banks performance was found to be statistically insignificant. Operational risk was discovered to have positive and significant effect on performance of Banks in both Nigeria and Ghana, while liquidity risk was found to have insignificant effect in both Ghana and Nigeria banks.

Kioko et al. (2019) examined the impact of financial risk on the financial performance of 11 commercial banks listed on the Nairobi Stock Exchange in Kenya for a period of five years from 2014 to 2018. Credit risk, market risk, liquidity risk and operational risk were the independent variables while financial performance was the dependent variable. Descriptive analysis was used and secondary data was adopted. The study found that credit risk, market risk and operating risk had a significant negative impact on financial performance, while liquidity risk had a significant negative impact on financial performance.

Basil and Ali (2020) studied the effect of financial risk on the performance of listed banks in Bahrain and the relative value of the most popular types of risk. The study covered 11 out of the 18 banks in Bahrain from 2014 to 2018. Secondary data was collected from the Bahrain Stock Exchange Database. ROA was used as proxy for bank performance and risk measures. Four forms of financial risk were used, namely capital risk, exchange rate risk, liquidity risk and operating risk. Regression analysis was used. It was revealed that there is an insignificant relationship between bank performance, exchange rate risk, liquidity risk and operating risk. The findings indicate a positive relationship between bank performance and capital risk. In addition, the findings indicate that capital risk is the most significant form of risk.

Ephias and Athenia (2020) examined the impact of credit risk on the financial performance of South African banks for the period 2008 to 2018. Panel data techniques, namely the pooled ordinary least squares (pooled OLS), fixed effects and random effects estimators was employed to test the relationship between credit risk and financial performance. Credit risk and financial performance were proxied by non-performing loans (NPLs), and ROA and ROE respectively. The results showed that credit risk, size, and bank leverage has a negative relationship with financial performance. The study also revealed that growth and capital adequacy had a positive effect on financial performance of South African banks.

Alim et al. (2021) investigated the effect of liquidity risk management on the financial performance of commercial banks in Pakistan. Pakistan. The panel data for OLS analysis was used. The data of all commercial banks operating in Pakistan during the period of study was taken from the year 2006 to 2019 using data archives of the State Bank of Pakistan website. The study revealed that, liquidity increases banks' performance in commercial banks of Pakistan.

Ibrahim (2023) investigated financial risk exposure of four banks in the United Arab Emirates during the years 2003 to 2009, by measuring stability levels for different types of financial risks using the coefficient of variation measure. The results revealed that all four sources of financial risk showed significant stability while both profitability indicators exhibited significant instability over the same period.

Kibs (2023) sought to establish whether country risk affects profitability of multinational banks in sub-Saharan Africa, and whether strategic decisions regarding 'where to go' for investment in terms of geographic diversification, and the 'source of capital' in terms of debt or equity financing, help mitigate country risk effects. Using panel data (2006-2020) of multinational banks in sub-Saharan Africa, and a two-step Systems Generalized Method of Moments (S-GMM) estimation technique was employed, the study find that in both short run and long run negative effect of country risk on profitability.

ChukNwude and Okeke (2018) investigated the impact of credit risk management on the performance of DMBs in Nigeria using five banks that had highest asset base. The ex-post facto research design was adopted using dataset for the period 2000–2014 secondary data collated from the annual reports and financial statement of the selected DMBs. The findings revealed that credit risk management had a positive and significant impact on total loans and advances, and on the ROA and ROE of the DMBs in Nigeria.

Olaoye et al. (2020) examined the effect of financial risks on performance of 10 DMBs using the explanatory variables of financial risks namely credit risks, insolvency risks, liquidity risks and market risks with time frame of 12 years (2007-2018). The ex-post facto research design was used, while the panel regression models was estimated using Unobserved Effects Model (UEM). The study findings showed that credit risk was negative and statistically significant with DMBs' performance; liquidity risk was inversely and insignificantly related to banks' profitability; insolvency risk have negative signs that are statistically insignificant to banks profitability. Market risk has insignificant and positive effect on profitability at 0.05 levels. Also, credit risk was found to be negative and statistically significant at Economic Value Added. On the contrary, the result showed that liquidity risk and market risk have positive signs that are statistically insignificant to Economic Value Added. On its part, credit risk established a negative and significant effect on ROA; liquidity risk and insolvency risk have negative and positive signs that are statistically insignificant to ROA.

Inegbedion et al. (2020) examined risk management and financial performance of Nigeria commercial banks. The study was a longitudinal survey, so the ex-post facto research design was adopted. Data were analysed using generalized method of moments (GMM) and vector Error Correction Model. The study showed that, banks' profitability is significantly influenced in the short-run by liquidity risk and in the long-run by credit risk, capital adequacy risk, leverage risk and liquidity risk. It was further revealed that, ROA was found to be positively related to liquidity risk but negatively related with credit risk. Arising from these findings, there is the need for effective risk management, especially credit, capital adequacy, leverage and liquidity risks, to enhance the profitability of banks in Nigeria.

Isedu et al. (2021) investigated the effects of financial risks on the performance of DMBs in Nigeria. More specifically, changes in financial performance were examined on the basis of the relative effect of credit risk, liquidity risk, market risk, operational risk and bank size. The study specifically focused on 18 DMBs listed on the floor of the Nigerian Exchange Group (NGX) for a period of 19 years. Both statistical and econometric techniques was applied in the analysis of the data used in the study. Panel data analysis technique was employed in the estimation of the specified model. The findings revealed that the combined effects of financial risks do not influence banks' performance negatively. More specifically, the results from the empirical analysis revealed that financial risk proxy by credit risk does not have any significant relationship with the financial performance of the sampled DMBs in Nigeria. Liquidity risk is a significant determinant of DMBs' performance in Nigeria in the period under investigation. Market risk, interest rate risk and Operational risk all did not in any way affect bank performance significantly in Nigeria.

Ighosewe (2022) examined the effect of market risks on the performance of banks in Nigeria spanning from 2011 to 2020. Secondary data was derived from the selected banks' financial statements to determine and measure the effect of fluctuations in market risks on Nigerian banks performance. Ex-post facto research design and the panel least square estimate method were adopted. The empirical analysis covered 150 bank-year observations and the results showed that interest rate risk, foreign exchange rate risk and capital adequacy risk all have negative yet noticeable effect on the Nigerian banks' performance. While equity risk have positive and insignificant effects on Nigerian banks' performance in the short run. On the other hand, market risk has a long-run effect on banks' performance in Nigeria.

METHODOLOGY

The study analysed the financial risks management on the performance of DMBs in Nigeria over the period of 13 years (2010-2022) using panel data. Quantitative statistical inference techniques were employed to produce the model results. An ex-post facto research design, which examined the impact of pre-existing variables, was utilized. The population consisted of 23 banks listed on the Nigerian Exchange Group as of December 31, 2022. Panel Data Regression in STATA version 17 was used for data analysis. The sample size was 10 DMBs namely: First Bank of Nigeria Plc., Guaranty Trust Bank Plc., Zenith Bank Plc., Access Bank Plc., Stanbic IBTC, United Bank for Africa (UBA), Fidelity Bank, First City Monument Bank (FCMB), Polaris Bank, and Unity Bank. These banks' annual financial reports served as the secondary data source, providing reliable information audited by independent firms. Panel data multivariate analysis was used to test the research hypotheses.

Model Specification

Model specification involves mathematically describing the economic relationship between dependent and independent variables. The model, adapted from Kolapo et al. (2012), is specified as follows:

$$Y= \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon \qquad (1)$$

$$ROE_{it} = \alpha + \beta_1 LR_{it} + \beta_2 CR_{it} + \epsilon \qquad (2)$$

Where:

Y = Dependent variable
ROE = Return on Equity
X_1, X_2 = Independent variables
β_1, β_2 = Beta coefficients
LR = Liquidity Risk
CR = Credit Risk
A = Intercept or constant term
ϵ = Error term

Apriori Expectation

The apriori expectation for this study is that the beta coefficients for liquid risk and credit risk would be greater than zero.

Assessment of the Variables

Return on Equity (ROE) measures the dependent variable (financial performance), while Liquidity Risk and Credit Risk measure the independent variables (financial risk).

RESULTS AND DISCUSSION

Regression Results

Table 1: Regression Analysis

Variable	Coefficients	Z-statistics	P-value
Intercept	-3.47689	-6.04	0.000
Liquidity Risk	0.4234641	4.09	0.001
Credit Risk	0.3980345	0.24	0.000
R-square	26.82		
Wald chi2	73.76		
Prob.	0.000		

Source: STATA……….. Output

The R-square value indicates that 26.82% of the variability in the ROE of listed DMBs in Nigeria could be explained by the liquidity risk and credit risk. The model fit is confirmed by the likelihood value of 5%. This evidence strongly suggests that the interaction of these factors significantly affects the financial performance of Nigeria's listed DMBs.

Test of Hypotheses

H_{01}: Financial Risk has no significant impact on the return on equity of listed Deposit Money Banks in Nigeria.

Based on the regression results, the null hypothesis that financial risk has no significant impact on the financial performance of Deposit Money Banks in Nigeria is rejected. Instead, the alternative hypothesis that financial risk significantly affects financial performance is accepted.

Findings and Discussion

The results indicate a strong correlation between liquidity risk and the financial health of Nigeria's listed DMBs. The statistical significance of the association, with a p-value less than 5%, supports this conclusion. Specifically, a 1% increase in liquidity risk corresponds to a 42% increase in financial performance, consistent with economic expectations. This positive correlation suggests that improvements in financial performance may drive increased liquidity risk as a source of external funds. This finding aligns with Caleb's (2019) assertion regarding the significant impact of liquidity risk on financial performance measures (ROE).

Additionally, the study found that credit risk significantly affects the profitability of Nigerian Deposit Money Banks, with a p-value of 0.000. The statistical significance of the relationship, again with a p-value less than 5%, supports this conclusion. The findings show that a 1% increase in the credit risk ratio results in approximately 40% enhancement in financial performance, consistent with economic predictions. This implies a reasonable expectation of a positive correlation between the overall leverage ratio and financial performance. Increased credit risk as a source of external funding is likely due to the rapidly rising profitability of Nigerian Deposit Money Banks. These results corroborate the findings of Anthony and Shanise (2018), who demonstrated the impact of credit risk on financial performance.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study's results indicate that financial risk positvely impacts the financial performance of Nigerian Deposit Money Banks. Specifically, the findings show that return on equity is significantly and positively influenced by liquidity risk (p=0.001), a key measure of financial risk. Additionally, credit risk also significantly affects the ROE of these banks (p=0.000). Therefore, the study concludes that financial risk, encompassing both credit risk and liquidity risk, influences the financial performance of Deposit Money Banks in Nigeria as measured by ROE.

Recommendations

Based on the findings and conclusion, it is recommended that:

i. Management of Nigeria's Deposit Money Banks should aim to minimize losses from bad debts and other relevant credit fees while maintaining an adequate level of overall and liquid assets. Efforts should also be made to engage with factoring agents.

ii. Senior management of Nigeria's Deposit Money Banks should devise strategic plans to attract sufficient deposits to support their operations.

The study focused on a limited number of Nigerian Deposit Money Banks over a 13-year period. To enhance the understanding and applicability of the findings, more extensive research is needed, encompassing a broader timeframe and diverse sectors within Nigeria. Researchers in the field could conduct similar studies using alternative financial performance measures, such as return on assets (ROA), return on investment (ROI), and return on sales (ROS) as dependent variables. This approach would provide finance managers in Nigeria with clearer guidance on the optimal financing mix to maximize firm value.

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PUBLIC SECTOR ACCOUNTABILITY AND FISCAL TRANSFORMATION: THE IMPACTS OF POLITICAL DYNAMICS

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Abstract
This study investigated the interaction between political dynamics and public sector accountability and fiscal transformation. The primary objective was to examine the influence of political regime types, political stability, and the policies of political parties on accountability mechanisms. Using a qualitative research design, the study relied on archival data from various countries, systematically coding and analyzing themes such as "political stability," "regime type," and "accountability practices." The findings revealed that democracies tend to foster more effective accountability through transparency and institutional checks and balances, while autocracies weaken accountability due to centralized power and limited transparency. Hybrid regimes show inconsistent accountability practices. Political stability supports the development of robust accountability mechanisms, whereas instability disrupts institutional functioning and fosters environments conducive to corruption. In coalition governments and polarized environments, accountability measures often weaken due to the need for compromise and partisan conflicts. The study concluded that enhancing transparency, strengthening institutional checks and balances, and promoting political stability are crucial for improving public sector accountability and fiscal management. Specific recommendations include implementing digital transparency platforms, enacting legal reforms to protect accountability institutions, providing governance training for public officials, and conducting public awareness campaigns. These strategies are feasible and have the potential to significantly enhance governance, reduce corruption, and ensure the efficient use of public resources, thus supporting successful fiscal transformation.

Keywords: Public Sector, Accountability, Fiscal Transformation, Governance, Transparency.

INTRODUCTION
Public sector accountability and fiscal transformation are critical components of governance that aim to ensure transparency, efficiency, and ethical conduct in the management of public resources. Mulgan (2000) defined public sector accountability as the responsibility of governments, public officials, and institutions to answer for their actions and decisions, and to be transparent and responsive to citizens and stakeholders. Mulgan's definition of public sector accountability highlights its multifaceted nature, emphasizing responsibility, transparency, responsiveness, ethical conduct, and the importance of effective accountability mechanisms. By adhering to these principles, governments and public officials could enhance governance effectiveness, promote public trust, and achieve sustainable development outcomes. Bovens (2007) posits that accountability mechanisms include legal frameworks, oversight bodies, audits, and reporting requirements aimed at ensuring public officials act in the public interest.

In other words, accountability is enforced through mechanisms such as audits, performance evaluations, citizen engagement, and transparency initiatives.

Lienart (2009) described fiscal transformation as the comprehensive reforms aimed at improving fiscal sustainability, efficiency, and effectiveness in the management of public finances. These reforms often involve restructuring fiscal policies, budgetary processes, and expenditure management to achieve long-term economic stability and meet public policy objectives. This underscores the importance of fiscal transformation in achieving long-term economic stability and advancing public policy objectives.

Most importantly, public sector accountability and fiscal transformation are interconnected, as accountability mechanisms play a crucial role in ensuring the effective implementation and oversight of fiscal reforms. Accountability ensures that fiscal policies are formulated transparently, implemented efficiently, and monitored effectively to achieve desired fiscal outcomes (Bovens, 2007; Lienert, 2009). This goes to say that accountability mechanisms, such as legislative oversight and independent audits, are essential for monitoring fiscal policies and ensuring compliance with budgetary constraints. Thus, public sector accountability and fiscal transformation are pivotal for promoting good governance, economic stability, and public trust in government institutions. By enhancing accountability mechanisms and undertaking fiscal reforms, governments could achieve sustainable fiscal outcomes and improve the allocation of resources to meet the needs of their citizens. This view is further buttressed by Mulgan (2000) and Tanzi and Schuknecht (2000) when they opined that addressing challenges such as corruption, inefficiency, and mismanagement requires robust accountability frameworks that promote transparency and ethical conduct in fiscal decision-making.

Statement of the Problem

Public sector accountability is essential for transparency and efficient governance, but its effectiveness is significantly influenced by political dynamics. Despite its importance, there is a notable research gap in understanding how factors such as regime type, political stability, bureaucratic politics, levels of democratization, political will, political parties, and international influences affect public sector accountability. Addressing these challenges requires nuanced research to design accountability frameworks that could withstand diverse political environments, enhancing governance and public trust.

This study, therefore, investigated the interaction between political dynamics and public sector accountability and fiscal transformation, in a bid to enhance the role of accountants in transforming Nigeria’s fiscal space for achieving sustainable economic development.

Objectives of the Study

The main objective of this study was to investigate the interaction between political dynamics and public sector accountability and fiscal transformation. The specific objectives were:

(i) Investigate the influence of political regime types on accountability
(ii) Analyze the effect of political stability on accountability practices.
(iii) Explore the influence of political parties on accountability mechanisms.

By achieving these goals, the paper aimed to fill the identified research gaps and provide a comprehensive understanding of the complex interplay between political dynamics and public sector accountability, offering insights for designing robust and resilient accountability frameworks.

Research Questions

(i) In what way does political regime types (democracies, autocracies, and hybrid regimes) impact the implementation and effectiveness of public sector accountability mechanisms?

(ii) How does political stability or instability affect the continuity and efficacy of accountability measures in various governmental contexts?

(iii) How does the policies and practices of political parties, especially in coalition governments or polarized environments, impact the effectiveness of public sector accountability?

METHODOLOGY

This study employed a qualitative research design focusing on archival data analysis. Qualitative research design involves systematic procedures for collecting and analyzing archival data to address the research questions. This approach allows for an in-depth examination of historical and contemporary documents to understand the complex interplay between political dynamics and public sector accountability and fiscal transformation. Data was collected from academic publications, theses and dissertations, reports and publications from international bodies, and some policy papers and official reports that provide information on public sector accountability and fiscal policies. By analyzing the archival data thematically, the study aimed to uncover patterns, relationships, and insights that quantitative methods might overlook.

Analysis

Impact of Political Regime Types on the Implementation and Effectiveness of Public Sector Accountability Mechanisms

The nature of political regimes significantly influences the implementation and effectiveness of public sector accountability mechanisms. Different regime types—democracies, autocracies, and hybrid regimes—exhibit distinct characteristics that affect how accountability mechanisms function and their overall effectiveness.

Democracies

In democratic regimes, accountability mechanisms are typically more robust and effective due to the inherent principles of transparency, participation, and checks and balances. Consequently, democracies emphasize the rule of law, free press, and civil society engagement, which are crucial for effective accountability. This assertion was supported by Diamond (1999) who opined that democracies often have institutionalized mechanisms for transparency and rule of law, such as independent judiciaries and free media, which scrutinize government actions and hold officials accountable. The same was supported by Norris (2012) who believed that the active participation of citizens and civil society organizations in democratic processes fosters greater accountability. Regular elections and freedom of expression allow citizens to demand accountability from their representatives. O'Donnell (2004) was also of the view that the separation of powers in democracies ensures that different branches of government could monitor and limit each other's powers, enhancing accountability.

Autocracies

Autocratic regimes generally exhibit weaker accountability mechanisms due to the concentration of power, limited transparency, and restricted political freedoms. In such regimes, accountability is often undermined by the absence of democratic institutions and processes. This view anchors Gandhi and Przeworski (2007) belief that in autocracies, power is typically centralized in a single leader or a small group, reducing the effectiveness of checks and balances. Thus, this concentration of power often leads to unchecked corruption and inefficiency. Scheduler (2013) also believed that autocratic governments are less likely to promote transparency and openness, as they control information flows and suppress dissent. This lack of transparency hinders public oversight and accountability. Levitsky and Way (2010) reported that autocracies often restrict the activities of civil society organizations and the media, which are critical actors in holding the government accountable. This repression weakens external accountability mechanisms.

Hybrid Regimes

When it comes to hybrid regimes, Diamond (2002) is of the perspective that Hybrid regimes often have formal accountability institutions, such as anti-corruption agencies and ombudsmen, but these institutions may lack genuine independence and effectiveness due to political interference. Levitsky and Way (2010) has similar views to Diamond (2002). They believed that in hybrid regimes, transparency initiatives may be selectively applied, often serving the interests of the ruling elite rather than promoting genuine accountability. This selective transparency undermines trust in accountability mechanisms. A view supported by Howard (2002) who surmised that While hybrid regimes may permit some level of civil society and media activity; these entities often operate under significant constraints, limiting their ability to hold the government accountable. Hence, it is safe to say that Hybrid regimes, which combine elements of democracy and autocracy, present a mixed scenario for public sector accountability. These regimes may adopt democratic institutions and practices while simultaneously maintaining autocratic controls.

Impact of Political Stability or Instability on the Continuity and Efficacy of Accountability Measures

Political Stability

In politically stable environments, there is greater opportunity for the long-term development and strengthening of accountability institutions. Stable governments could implement reforms, establish robust legal frameworks, and build capacities within public institutions without the disruption caused by frequent changes in administration or policy (Acemoglu et al., 2001). North (1990) also remarked that political stability allows for the continuity of policies and programs, ensuring that accountability measures could be consistently applied and evaluated over time. This continuity helps in building public trust and achieving incremental improvements in governance. In the same vein, Keefer (2007) revealed that stability often enhances investor confidence and economic growth, which could provide the necessary resources for funding accountability institutions and initiatives. Economic prosperity further supports the establishment of effective oversight and regulatory frameworks. Given these views, it is observed that political stability generally fosters an environment conducive to the development and maintenance of effective accountability mechanisms. Stability provides a consistent and predictable backdrop against which institutions could operate and evolve. For example, countries like Sweden and Germany, known for their political stability, have developed comprehensive and effective accountability frameworks. These frameworks include strong legal systems, independent audit institutions, and vibrant civil societies that continuously monitor and hold public officials accountable (Rothstein & Teorell, 2008).

Political Instability

According to Przeworski et al. (2000), frequent changes in government or administrative chaos could lead to the dismantling or weakening of accountability institutions. New regimes may prioritize different policies, leading to the abandonment or alteration of existing accountability measures. This could lead to erratic policy enforcement as accountability initiatives may be launched but are often swiftly withdrawn or altered, hindering the establishment of consistent and effective oversight systems as observed by Haggard and Kaufman (1995). Furthermore, instability could lead to economic downturns and budgetary constraints, limiting the resources available for maintaining and enhancing accountability institutions. This financial strain could reduce the capacity of oversight bodies to perform their functions effectively (Collier & Hoeffler, 2004). Thus, political instability, characterized by frequent government changes, civil unrest, or internal conflicts, poses significant challenges to the continuity and efficacy of accountability measures. Instability disrupts the functioning of institutions and undermines the implementation of long-term reforms. These cases could be seen in countries experiencing political instability, such as Venezuela and Zimbabwe, which face significant challenges in maintaining effective accountability measures. Frequent government changes, economic crises, and social unrest in these countries have led to the erosion of accountability institutions and increased corruption (Bratton & Chang, 2006).

Impact of Political Parties' Policies and Practices on the Effectiveness of Public Sector Accountability in Coalition Governments or Polarized Environments

The policies and practices of political parties significantly impact the effectiveness of public sector accountability, particularly in coalition governments or highly polarized environments. These contexts create unique dynamics that could either strengthen or undermine accountability mechanisms depending on the interactions and strategies of the political actors involved. Coalition governments, composed of multiple political parties, often face challenges in maintaining coherent and effective accountability mechanisms due to the necessity of compromise and negotiation among coalition partners. In coalition governments, policies are often the result of extensive bargaining and compromise among coalition partners. This could lead to diluted accountability measures as parties prioritize coalition stability over stringent oversight (Lijphart, 1999). For instance, weaker anti-corruption laws might be passed to appease coalition partners, reducing the overall effectiveness of accountability measures (Müller & Strøm, 2000).

The diffusion of responsibility among coalition partners could blur lines of accountability. When multiple parties share power, it becomes challenging to attribute accountability for policy failures or corruption, as parties may deflect blame onto one another (Andeweg, 2000). Significantly also, frequent policy shifts could occur as coalition governments renegotiate agreements and adjust policies to maintain coalition unity. This inconsistency could undermine long-term accountability initiatives, as ongoing projects may be interrupted or altered to fit new coalition agreements (Strøm et al., 2008). The assertions above could be traced to Italy's frequent coalition governments, how it often struggles with maintaining effective accountability due to the necessity of balancing diverse party interests. The need for coalition compromises has sometimes resulted in weak anti-corruption policies and fragmented accountability measures (Di Palma, 1977).

In highly polarized political environments where ideological divisions between parties are stark, accountability mechanisms often suffer due to intensified partisan conflicts and the politicization of oversight processes. Polarization leads to heightened partisan conflicts, where political parties focus more on discrediting their opponents than on effective governance. This could result in a lack of genuine commitment to accountability as parties use oversight mechanisms as tools for political attacks rather than for ensuring transparency and integrity (McCoy et al., 2018). In polarized environments, accountability institutions such as anti-corruption bodies and audit agencies may become politicized. Parties in power may appoint loyalists to key positions, undermining the independence and effectiveness of these institutions (Levitsky & Ziblatt, 2018).

Lastly, intense polarization erodes public trust in political institutions and accountability mechanisms. When citizens perceive that oversight bodies are biased or used for political gain, their trust in the efficacy of these mechanisms diminishes, reducing their willingness to engage in civic oversight (Hetherington & Rudolph, 2015). The United States has particularly in recent years, experienced significant political polarization, affecting the functionality of its accountability mechanisms. Partisan conflicts have led to the politicization of oversight committees and investigations, undermining their credibility and effectiveness (Mann & Ornstein, 2012).

Findings and Recommendations

Firstly, the type of political regime plays a crucial role in shaping the implementation and effectiveness of public sector accountability mechanisms. Democracies tend to foster more effective accountability through transparency, citizen participation, and institutional checks and balances. In contrast, autocracies weaken accountability due to centralized power, limited transparency, and repression of civil society. Hybrid regimes exhibit a mix of these characteristics, often resulting in inconsistent and selective accountability practices. Understanding these dynamics is essential for designing robust accountability frameworks that could adapt to different political contexts.

Secondly, political stability and instability have profound impacts on the continuity and efficacy of accountability measures in various governmental contexts. Stable political environments support the development and sustainability of robust accountability mechanisms through consistent policies, institutional development, and resource availability. Conversely, political instability disrupts institutional functioning, leads to policy inconsistency, constrains resources, and fosters environments conducive to corruption and patronage. Understanding these dynamics is crucial for designing resilient accountability frameworks that could withstand political fluctuations.

Lastly, the policies and practices of political parties in coalition governments and polarized environments critically influence the effectiveness of public sector accountability. Coalition governments often face challenges in maintaining coherent and stringent accountability measures due to the need for compromise and shared responsibility. In polarized environments, partisan conflicts and the politicization of oversight institutions undermine the integrity and efficacy of accountability mechanisms.

Thus, Understanding the dynamics of political regimes, stability, and party politics is essential for designing effective public sector accountability frameworks that support fiscal transformation. Democracies, with their emphasis on transparency and participation, provide a conducive environment for fiscal reforms. In contrast, autocratic and hybrid regimes present challenges due to their limited accountability practices. Political stability supports consistent and effective accountability, crucial for sustainable fiscal management. Conversely, political instability disrupts these processes, leading to inefficient use of resources. Lastly, the policies and practices of political parties in coalition and polarized environments can either strengthen or weaken accountability mechanisms, impacting the effectiveness of fiscal transformation efforts. Therefore, policymakers must consider these political dynamics to enhance public sector accountability and achieve successful fiscal transformation.

Future Research

Given the complexity and multifaceted nature of public sector accountability and fiscal transformation, several areas warrant further investigation to deepen understanding and improve practices.

i. Comparative Analysis of Accountability Mechanisms
ii. Role of Technology in Enhancing Accountability
iii. Political Dynamics and Accountability
iv. Public Participation and Accountability

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THE MODERATING EFFECT OF RISK MANAGEMENT COMMITTEE CHARACTERISTICS AND FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS (DMBs) IN NIGERIA

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Abstract
This study examines the characteristics of risk committees as well as their effects on the financial performance of deposit money banks (DMBs) in Nigeria. The study made use of secondary data gathered from the banks' annual reports, and 14 deposit money banks were chosen as the sample using the purposive sampling technique. The data was analyzed using the panel regression approach. Using a fixed effect model, the study discovered that the size and independence of risk management committees have a negative impact on the financial performance of deposit money banks in Nigeria, while the size of the committees is insignificant. Gender diversity and meetings have been shown to have a positive impact on the financial performance of DMBs in Nigeria. This study suggested that more women be included on the risk management committee, as well as that more frequent meeting be held to facilitate this participation.

Key words: Financial Performance; Risk Management Committee; Deposit Money Banks

INTRODUCTION

Companies are confronted with a variety of issues that pose major dangers to their ability to achieve their objectives in an environment marked by increased environmental instability and competition. Companies must be properly managed in order to reduce risk-related losses, and this may be accomplished through risk management policies and practices. The seamless operation of financial institutions has a tendency to make or break the economy of a country. It is impossible to overstate the importance of financial institutions in a society, which is why the laws and regulations that govern these organizations are so stringent. Financial institutions are exposed to a variety of hazards, including credit, market, and operational risks.

Abuse of authority, fraud, and other criminal activities caused significant suffering in the Nigerian banking system during the time leading up to the consolidation process (2004-2005). As a result, the Central Bank of Nigeria (CBN) implemented a number of measures to guarantee that financial institutions in Nigeria performed better than they did previously. These laws include the raising of the capitalization of banks to ₦25 billion and the establishment of a code of corporate governance for banks and other financial institutions. The formation of a risk management committee to oversee and monitor the activities of banks is a key component of the Nigerian Code of Corporate Governance for Banks, which is an essential component of the Code (CBN Code, 2014). However, even after the CBN established governance codes and regulations, banks continued to experience losses due to operational and credit default risks in the post-consolidation period, despite the implementation of these policies and codes (Owojori et al., 2011).

It is certain that a poorly functioning risk management system would result in losses for a company, either directly or indirectly. For example, the global economic slump, high production costs leading to a drop in production activities, and an increase in inflation, which reduces customers' buying power, among other factors, have resulted in falling company performance and discontinuity in the operations of businesses (Halim et al., 2017). As a result, with the threat of bankruptcy on the horizon, businesses must factor risk into their planning, management, and decision-making processes. Managers are required to identify and manage risks inside their organizations, which necessitates the implementation of an enterprise risk management system within the organization. Subramaniam (2009) argued that an effective and efficient risk management system helps organizations achieve their business objectives, increase the quality of corporate reporting and protect their goodwill by reducing their exposure to risk. For a risk management system built by an organisation to be effective, it must be subjected to appropriate oversight. Companies, as a result, tend to establish a Risk Management Committee (RMC), which is separate from the audit committee and is responsible for managing the risks of the organization.

The RMC is an independent committee whose major and sole function is the establishment of policies relating to risk in the company's operations as well as the execution of such rules. The committee assists the board of directors in the performance of its regulatory responsibilities with respect to the corporation's risk tolerance, risk control, and enforcement procedures, among other things. Tolerance for risk refers to how much and what kind of risk an organization is willing and able to tolerate in its market activities, regardless of the company's corporate goals or stakeholder responsibilities.

In recent years, some companies in Nigeria, particularly banks, encountered business disasters that resulted in bankruptcy, mergers, and acquisitions. It is important to remember that the inability of financial institutions to retain enough liquidity would eventually result in a financial crisis, regardless of how profitable they are, how large their capital base is, or how good their asset quality is (Akhtar et al., 2019). As a result, it is critical that financial institutions in Nigeria take steps to assist them in dealing with the issues posed by shifting monetary policies. Good corporate governance procedures, such as board committees, should, in an ideal world, have an influence on the performance of a firm and would be crucial in controlling liquidity risks (Ayodele & Alabi, 2014; Chukwunulu et al., 2019). As a result, the purpose of this study is to explore the effect of risk management committee characteristics on the financial performance of DMBs.

LITERATURE REVIEW

Conceptual Review

Firm Financial Performance

In order to assess financial performance, banks and other financial institutions are being evaluated using a combination of financial ratios and benchmarking as indicators of performance relative to objectives (Ashbaugh-Skaife et al., 2009). There are several elements that influence the advancement of a company's financial performance, and most studies have divided the variables that influence the performance of banks into categories. In addition to the state of various subsidiaries or divisions (for example, small or associated with support units, unit subsidiaries, or numerous divisions), the situation and size of the bank are examples of non-financial aspects to take into consideration.

There is increasing competition in the national and international banking markets, and developments in the banking system, as well as new technological developments, indicate significant revolutions in the banking environment, which place a burden on all banks to make appropriate arrangements in order to compete in the new competitive financial environment. Qarri (2010) claimed that the majority of previous studies on organisational performance evaluation focused solely on operational effectiveness and operating efficiency, which could have a negative influence on an organization's ability to continue to exist. The study discovered that, when using an advanced two-stage data creation analysis model, an organization's greater effectiveness does not necessarily mean that it has greater efficiency. As a result, it is necessary to evaluate aspects that influence organisations' financial performance in addition to financial metrics, such as effective governance structures.

Measures of financial performance comprise but are not limited to return on assets (ROA) and return on equity (ROE). For the purpose of this study, financial performance is measured using the share price divided by sales per share.

Risk Management Committee (RMC)

Advisory and suggestions to the Board of Directors on risk management governance are the responsibilities of the RMC. The Committee has a supervisory role in the development, implementation, and monitoring of risk management policies on behalf of the Board of Directors, among other things. This committee reports to the Board on a regular basis on the condition of the entity's operational and financial practises (Sufi & Qaisar, 2015).

According to the Securities and Exchange Commission [SEC] (2011) Nigerian Code of Corporate Governance, a company's board of directors may establish a risk committee to assist the board in fulfilling its role to ensure effective risk management for the firm. Many studies have claimed that having an effective committee of management in place may improve a company's performance and that economic success is primarily dependent on the process of risk control (Edogbanya & Kamardin, 2015). Because of this, according to the SEC Code of 2011, the risk committee is an important committee on the board of directors.

Theoretical Framework

The agency theory establishes a contractual relationship between the principal (owner/shareholders) and another agent (managers) to act on behalf of the owners (Jensen & Meckling, 1976). Agency issues arise between the principals and their agents from varying problems with asymmetric information and differences in sensitivity to firm-specific hazards.

Also, the problem of risk sharing arises from the different risk preferences of the principal and agent. Many a time, managers are riskseekers and take actions that affect the firm’s financial performance based on their desire for increased compensation.

Corporate governance mechanisms were established to reduce the agency problem that occurs in companies (Harrison & Harrell, 1993). In general, from the viewpoint of agency theory, the risk committee acts on behalf of the shareholders in order to manage risk exposure. Thus, the RMC’s primary responsibility is to monitor management's participation in riskier activities that may have affected the firm's objectives and to inform management when such activities reach an unacceptable risk level that may impede the firm's financial performance. The RMC could also enhance the performance of the Board of Directors in performing its oversight responsibilities, particularly when it comes to harmonising the interests of the agent and principal (Jiraporn et al., 2009). Due to the fact that creating a risk management committee may boost the transparency of a firm by exposing more information about risk and providing better insight into risks to shareholders, a risk management committee is recommended.

As a result, having an effective committee in a firm not only helps the board of directors, but it also helps to limit the number of agency problems that emerge in the organisation. Committees that are regarded as effective are those that have a high level of independence, as well as diversity in terms of gender, ethnicity, and competence. Because it allows members to bring diverse traits to the table and provide ideas that are not seen or justified by internal directors, diversity in the board's membership fosters a high degree of financial performance for the company (Arfken et al., 2004).

Empirical Review

Risk Management Committee Size and Financial Performance

The greater the number of directors on a board, the greater the number of directors that are available to establish committees. As a result, the formation of a risk management committee may be tied to the size of the board of directors. Additionally, the size of the risk committee is used as an indicator of an entity's readiness to contribute capital in order to increase the wealth of its shareholders. As Bédard et al. (2004) pointed out, not only does a board committee have monitoring authority, but the ensuing multiplicity of perspectives within a committee makes it more successful in resolving potential issues. The size of the committee has a considerable influence on the performance and functioning of the committee. According to the findings of research done by Bedard et al. (2004), a larger committee provides greater variety and experience, which results in more efficient recommendations to the board.

However, research conducted by Ellul and Yerramilli (2011), Ng et al. (2012), and Zemzem and Kacem (2014) discovered a negative association between the size of the risk committee and the performance of the organisation. In spite of the fact that the risk committee must have a minimum of three members in order to function effectively, the agency theory proposes that an increased size of risk management committees with diverse knowledge and expertise would enhance the monitoring of managers' behaviour toward risk management, thereby ensuring optimum performance (Aebi et al., 2012; Jensen & Meckling, 1976). Therefore, this study proposes the hypothesis that:

The size of the risk management committee is significantly related to financial performance of deposit money banks in Nigeria.

Risk Management Committee Gender Diversity and Financial Performance

Another attribute of the risk committee that may affect the performance of a corporation is gender diversity. Gender diversity here refers to male or female committee members. Existing studies have linked managerial gender diversity to financial reporting quality, firm value, firm growth, and other firm characteristics. It is objectively true that women are more vigilant than men (Khlif & Achek, 2017). Females are seen as risk averse and able to tolerate risk to an acceptable level (Huang & Kisgen, 2013; Hutchinson et al., 2015). Jia (2019) revealed that women are likely to be assigned to the risk management committees as a result of their skills in delivering firm-wide risk management benefits. The inclusion of females in a risk management committee would bring a balance in the committee and ensure the quality of decision-making which would result into optimum performance. Thus,

Gender diversity of RMC significantly affects the financial performance of deposit money banks in Nigeria.

Risk Management Committee Independence and Financial Performance

Various studies have documented the importance of board independence. Board independence is a key component of governance (Abdul Rahman & Salim, 2010). Independent directors oversee management actions (Fama & Jensen, 1983) because they do not have personal interests in the firm and make fair judgments without any bias (Beasley et al., 2000). The participation of a considerable number of non-executive board members is widely viewed as a strong indicator of the board's independence from management and governance (Abubakar et al., 2018). One of the things Protiviti (2011) said is that having independent non-executive directors is a must for working well with the people in charge of the company's risk management activities.

Zemzem and Kacem (2014) investigated the relationship between the risk management committee and the financial performance of a Tunisian lending company between 2002 and 2011. The results of the study revealed a statistically significant positive relationship between the variables between 2002 and 2011. Statistically, Kallamu and Saat (2013) found that there was a strong link between the percentage of independent directors on the risk committee and financial performance, and that there was a strong link between the percentage of independent directors on the risk committee and firm value, too.

Hence, the hypothesis:

RMC independence significantly influence financial performance of DMBs in Nigeria.

Risk Management Committee Meeting and Financial Performance

Various issues affecting a company are raised and disclosed in a meeting, and the number of board meetings signals the financial performance (Kakanda et al., 2018). Thus, the frequency of board meetings is a significant attribute that affects firm growth, which is a result of financial performance. A meeting is a good venue for members of RMC to communicate openly and discuss policies that result in improving the firm’s risk control. More so, the frequency of meetings makes members of a committee more active in the affairs of the company (Raghunandan & Rama, 2007). The number of meetings demonstrates the level of effort made by board members to perform their roles (Sori et al., 2009) and allows board directors to gain a better understanding of the factors affecting a firm (Ng et al., 2013). Hence, *RMC meeting has a significant relationship with financial performance of DMBs in Nigeria*

METHODOLOGY

The research design used in this study is an ex-post facto research design, which indicates that the data was collected after the event took place, rather than before. A total of all DMBs that are publicly listed on the Nigerian Exchange Group (NGX) are included in the study's population, and the sample comprises of 14 listed DMBs, selected for the purpose of the study under financial service firms in Nigeria, with a 10-year time frame from 2010 to 2019. The data for the study was gathered from the annual reports of the companies involved. The data were analyzed using the ordinary least square (OLS) regression method, and pre-estimation tests such as the Hausman test, normality, heteroskedasticity, multicollinearity, and correlation tests were run to gain insight into the data and determine the suitability of the regression method. Table 1 shows the measurements of variables as well as the sources of those measurements.

Table 1. Measurement of Variables

Variables	Definition	Measurement	Source
PSAL	Financial Performance (DV)	Share price divided by sales per shares	Nguyen et al. (2014)
RCMS	Risk Committee Size	The number of members/ directors in the risk management committee	Erkens et al. (2012)
RCID	Risk Committee Independence	Percentage of non-executive directors and shareholders in risk committee to total risk committee members size	Ibrahim et al. (2020)
RCGD	Risk Committee Gender Diversity	Percentage of female risk committee members to total risk committee members	Fondas and Sassalos (2000)
RCTM	Risk Committee Meeting	Number of meetings held by the risk committee members in a year	Kakanda et al. (2018)
FSIZ	Firm Size	Natural Log of total assets	Elamer and Benyazid (2018)

Source: Authors' Compilation (2024)

RESULTS AND DISCUSSION

Descriptive Analysis

Table 2: Descriptive Statistics

Variable	Mean	Std. Dev.	Maximum	Minimum	Obs
PSAL	1.6238	1.5590	7.6411	.0715	130
RCMS	6.9462	2.3138	14	0	130
RCID	64.5022	18,6153	100	0	130
RCGD	15.7124	15.9128	66.6667	0	130
RCTM	4.1231	1.6043	9	0	130
FSIZ	8.9605	0.6599	9.8541	7.0582	130

Based on descriptive results from Table 2, the mean value and standard deviation of the financial performance (PSAL) for the firms are 1.6238 and 1.5590, respectively, while 0.0715 and 7.6411 are the minimum and maximum values, respectively. It implies that while some banks' share prices are low, others maintain a steady growth in their share prices. Risk Committee Size has an average value of 6.9462, which indicates that the size of the committee in many deposit banks is within a considerable range. The lowest and highest values of committee size are 0 and 14. This implies that some deposit money banks have no risk committee.

Risk Committee Independence (RCID) has an average value of 64.5022 and a standard deviation of 18.6153 while the minimum and maximum values are 0 and 100, respectively. This result reveals that independence needs to be considerably maintained in the establishment of the risk committee in Nigerian deposit money banks. In addition, Risk Committee Gender Diversity has an average and standard deviation values of 15.7124 and 15.9128 respectively. However, the least and highest values are 0 and 66.6667, respectively, which shows that females are not included in the risk committees of some banks and could also result from the absence of a risk committee in some firms. Furthermore, Risk Committee Meeting (RCTM), with a mean value of 4.1231, shows that meetings are on average held by members of the committee, while the maximum and minimum values are 9 and 0 respectively. The minimum value must be as a result of the non-existence of a separate committee on risk management. The control variable, firm size (FSIZ), has an average value of 8.9605 with a standard deviation of.6599, while the maximum and minimum values are 9.8541 and 7.0582 respectively.

Correlation Analysis

The Pearson correlation analysis matrix and multicollinearity test are shown in Table 3. Correlation helps in deducing the degree or extent of the relationship among variables, as excessive correlation among independent variables could lead to multicollinearity, which could consequently lead to misleading results. Based on the results of the correlation matrix in Table 3, it is worthy to note that the risk committee size (RCMS) and independence (RCID) are negatively correlated with the financial performance, while risk committee gender diversity (RCGD) and risk committee meeting (RCTM) maintain a positive correlation with financial performance. Furthermore, firm size (FSIZ), which is the control variable, has a positive correlation with financial performance among deposit money banks in Nigeria.

Table 3: Correlation Matrix and Multicollinearity Test

Variable	PSAL	RCMS	RCID	RCGD	RCTM	FSIZ	1/VIF	VIF
PSAL	1.0000							
RCMS	-0.1402	1.0000					0.8567	1.17
RCID	-0.0645	-0.2962	1.0000				0.7344	1.36
RCGD	0.1209	0.1077	0.0142	1.0000			0.8984	1.12
RCTM	0.1038	-0.0692	0.4409	0.1322	1.0000		0.7870	1.27
FSIZ	0.4056	0.2443	-0.0624	0.2936	0.0355	1.0000	0.8677	1.15
Mean VIF								**1.21**

Source:

Correlation exceeding 0.8 or 0.9 signifies the presence of multicollinearity. As revealed in Table 3, VIFs are not beyond the threshold of 10. This indicates the non-existence of the multicollinearity problem.

Regression Analysis

Table 4: Regression result

Variables	Coefficient	z-value	p-value
RCMS	-.0670914	-1.20	0.231
RCID	-.0168987	-2.25	0.024**
RCGD	.0246067	3.09	0.002*
RCTM	.1646373	1.95	0.051***
FSIZ	1.118981	5.74	0.000*
Number of Obs	130		
R Squared	0.2670		
F(4, 9)	11.00		
Prob > chi2	0.0000		
Hausman Test	7.92		0.1610
Wooldridge Test (Autocorrelation)	8.227		0.0185
Breush-Pagan / Cook-Weisberg (Heteroskedasticity)	14.01		0.0002*
Shapiro-Wilk W (Normality Test)	0.6338		0.0000*

CONCLUSION

According to the findings, RMC features such as gender diversity, independence from the bank's board of directors (BOD), size, and meetings had an impact on the financial performance of listed deposit money banks in Nigeria between 2010 and 2019. In accordance with the results of the panel regression analysis, the study concluded that committee size has no significant relationship with financial performance, whereas risk committee independence has a negative impact on financial performance; gender diversity and meeting frequency have a positive relationship with financial performance; and risk committee independence has a negative relationship with financial performance. As a result, the study recommended that the risk committee be enhanced by increasing the proportion of women on its membership committee and that the committees meet on a regular basis to guarantee that risks are handled in order to fulfil the company's objectives and improve its performance.

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ESG DISCLOSURE: A SIMULATED ANALYSIS OF THE NIGERIAN EXCHANGE GROUP SUSTAINABILITY DISCLOSURE GUIDELINES

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Abstract
This study examined ESG disclosure in Nigeria. The study used a quantitative approach, the study focused on listed manufacturing companies in Nigeria, analyzing data from annual financial and sustainability reports. Content-analysis approach was employed to assess ESG disclosure based on a checklist derived from the NGX sustainability disclosure guidelines. The quality of disclosure was evaluated using a six-point rating scale, emphasizing comprehensive and relevant information for stakeholders. The findings reveal a significant decline in ESG disclosure levels among listed manufacturing firm's post-implementation of the NSE-SDGs, despite regulatory efforts to promote transparency. The study recommends that there is a need for enhanced regulatory oversight and enforcement mechanisms to encourage more robust ESG disclosure practices among listed companies. While voluntary guidelines play a role, regulatory interventions may be necessary to ensure compliance and promote transparency.

Key words: ESG Disclosure, Sustainability reporting, Comparative, NSE-SDGs, Nigeria

INTRODUCTION

In recent decades, there has been a global shift towards greater expectations for corporations to improve transparency and disclosure related to their environmental, social, and governance (ESG) policies, risks, and impacts. This trend reflects the increasing concerns expressed by various stakeholders, including investors, consumers, regulatory bodies, and the broader public on critical issues, such as climate change, human rights, diversity, and ethical business practices. Given the growing emphasis on securing investments that would have a positive social impact and promote sustainability, Environmental, Social, and Governance (ESG) analysis has become crucial to the investment process (Caporale et al., 2022). When making assessments, financiers and investors may be left with knowledge gaps due to unclear ESG practice disclosures (Rabaya & Saleh, 2021). ESG disclosures inform stakeholders, such as regulators, communities, investors, and employees, about a company's overall initiatives (Atif et al., 2022).

In Nigeria, ESG reporting is still in its early stages of development, KPMG analysis revealed that only 55% of Nigerian companies report sustainability related information in their financial reports, which is 5% lower than the global average of 60% (KPMG, 2022). According to a

KPMG Nigeria's analysis of companies' data, Nigeria's sustainability reporting rate decreased by 7% between 2020 (85%) and 2022 (78%). This decline was mostly attributable to a change in the list of Nigerian companies with the highest revenues; some companies that appeared on the 2022's list did not disclose their sustainability performance, as contrasted to companies that were on the 2020's list. This falls within the range. Umoren et al. (2015) findings submitted that ESG disclosure was 53%. This was made up environmental scores (7%), social scores (66%) and governance scores (81%). This is an indication that the rate of ESG disclosure among listed firms in Nigeria has not improved significantly.

Consequently, the Nigerian Exchange Group (NGX) strongly encourages listed companies to voluntarily disclose ESG-related information in their annual reports. Nigeria has exhibited a resolute approach to mitigating climate change and promoting sustainability in line with worldwide obligations. After receiving approval from the Securities and Exchange Commission (SEC), the NGX released the Sustainability Disclosure Guidelines (SDG) on November 9, 2018 in response to investors' demand for transparency in disclosing climate and sustainability risks. Publicly-traded corporations are required by these guidelines to include information about their sustainability performance in their annual reports.

The SDG provides a framework for companies to report on their sustainability initiatives. Although these guidelines are not legally binding, they serve as a blueprint for companies seeking to enhance their ESG reporting practices. However, despite the adoption of sustainability practices, several organizations still struggle with understanding, identifying, and communicating the priority of ESG relevant to their specific business (Igbonovia & Agbadua, 2023). Thus, this study compares the level of ESG disclosure prior to the NGX SDG and after. The objective is to find out how listed companies in Nigeria have responded to the mandate of sustainability reporting given the regional reporting disclosure guideline initiated in 2018 by NGX. ESG disclosure does not differ significantly pre (2015-2018) and post (2019-2022) the NGX SDG.

Global Reporting Initiative (GRI) and NGX SDG

It is crucial to emphasize that the GRI was closely involved in the development of the NGX SDG. The question is whether reporting organizations should create separate reports for the GRI Criteria and the NGX-SDG, or if the NGX-SDG are sufficient to provide a sustainability report that satisfies both national and international reporting standards, such as the GRI Standards. Furthermore, the 36 GRI Sustainability Reporting Standards, which are divided into 33 Topic Specific Standards, 3 Universal Standards (GRI 101-Foundation; GRI 102-General Disclosure; and GRI 103-Management Approach), and the NGX-SDG Focus Areas, Principles, and Core Elements, which cover the guidelines' Governance, Economic, Social, and Environment (ESG) topics, fully cover the requirements contained in the NGX-SDG.

Table 1: Comparison between GRI and NGX SDG

Feature	GRI ESG Components	NGX SDG-ESG Components	Perceived Gap
Environmental	1. Material consumption and recycling 2. Energy consumption and GHG emissions 3. Water usage and wastewater discharge 4. Biodiversity and ecosystem impacts 5.Air emissions and pollution control 6. Compliance with environmental laws	1.Product and services responsibility (eco-friendly and impact on environment) 2.Waste management 3. Water (Used and recycled) 4. Energy 5. Compliance	Biodiversity and air emissions was not clearly stated in the NGX SDG
Social	1. Labour practices and working conditions 2. Diversity and inclusion 3. Human rights in the workplace 4. Community engagement and development 5. Customer and supplier social responsibility 6. Stakeholder engagement and grievance mechanisms	1. Diversity in the work place 2.Labour practices 3.Occupational health and safety 4. Human right 5. Society (CSR/ community programmes)	The concept of Stakeholder engagement and grievance mechanism was not explicitly considered
Governance	1. Corporate governance structure and ethics 2. Anti-corruption measures 3. Risk management and compliance 4. Transparency and disclosure 5. Stakeholder engagement 6. Effectiveness	1.Anti-corruption	The NGX-SDG summarized governance into one proxy which is anti-corruption measures. Other governance dimensions were not clearly outlined.

Source: ngxgroup.com and globalreporting.org

METHODOLOGY

This study employed a quantitative approach. Non-financial companies listed on the NGX were studied. The focus was on consumers goods (21 companies) and Industrial goods (13 companies) which captured 34 listed companies. Data collection and selection of ESG scoring objects. ESG-related quantitative data disclosed by manufacturing companies listed on NGX was obtained from the annual financial reports and sustainability reports of the sampled manufacturing companies. Since there is no unified standard for ESG information disclosure and no fully mandatory ESG disclosure policy, ESG-related information of companies available to the public is very limited. It mainly relies on the voluntary ESG disclosure of enterprises. In the case of listed manufacturing companies in Nigeria, the NGX SDG stipulate that all listed companies should ensure that their sustainability report contain information that is relevant and meaningful to stakeholders.

This study employed the content-analysis approach as used in previous studies (Iredele & Moloi, 2020). Data on ESG disclosure was based on a checklist covering ESG performance variables derived from the NGX SDG. The NGX sustainability disclosure framework aligns with the GRI. The quality of information reported was assessed using a six-point rating scale as adapted from previous studies, and this ranged from 0, where the item was not mentioned at all, to 1, where the item was 'just mentioned' to 5, for 'Significant disclosure'. The scale was developed within the NSE-SDGs principles for sustainability disclosure (NGX, 2018).

The maximum score obtainable by a firm from the five environmental indicators using the six-point rating scale was 25. Also, the maximum score obtainable by a firm from the five social indicators using the six-point rating scale was 25. Lastly, the maximum score obtainable by a firm from the one governance indicator using the six-point rating scale was 5. In summary, the maximum score obtainable by a firm from the 11 sustainability indicators using the six-point rating scale was 55.

One-way ANOVA was used to test the hypothesis with the aid of SPSS. The test compares the mean difference of ESG disclosure pre (2015-2018) and post (2019-2022) NGX SDG.

Table 2: ESG score

Level of disclosure interpretation	Assigned score
Not mentioned in the report	0
Just mentioned - there is no further explanation of the matter beyond a brief reference in the report.	1
Less disclosure is made—the topic is only briefly covered in the report, which could include measurable outcomes, with minimal background information given.	2
Moderate disclosure: discussion of the topic, measurement findings, and provision of a quantifiable goal for the present and/or future.	3
Disclosure is largely provided; the performance for the current year is compared to the target and mitigation is offered to enhance performance.	4
Significant full integration is done by connecting the financial component of the issue with the risk, target, and mitigation measures.	5
Total	

Source: Adapted from Iredele and Moloi (2020)

Variable measurement

Table 3: Variables Measurement

S/N	Variables	Definitions	Type	Measurement	Source
1	EDS	Environmental disclosure	Independent	Environmental practices /performance score ranging from 0 to 5	Iredele and Moloi (2020)
2	SDS	Social disclosure	Independent	Social practices /performance score ranging from 0 to 5	Iredele and Moloi (2020)
3	GDS	Governance disclosure	Independent	Governance practices /performance score ranging from 0 to 5	Iredele and Moloi (2020)

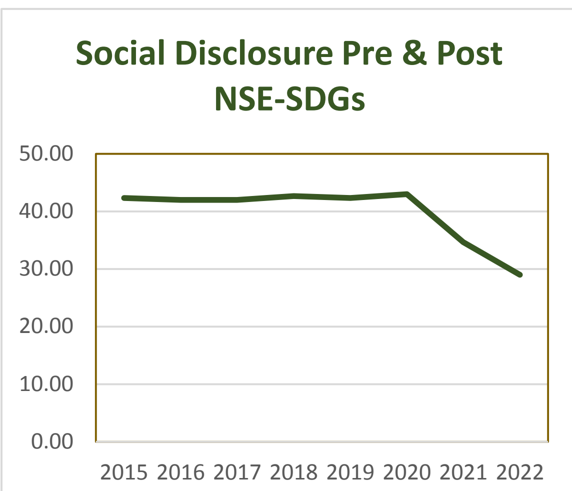
Result

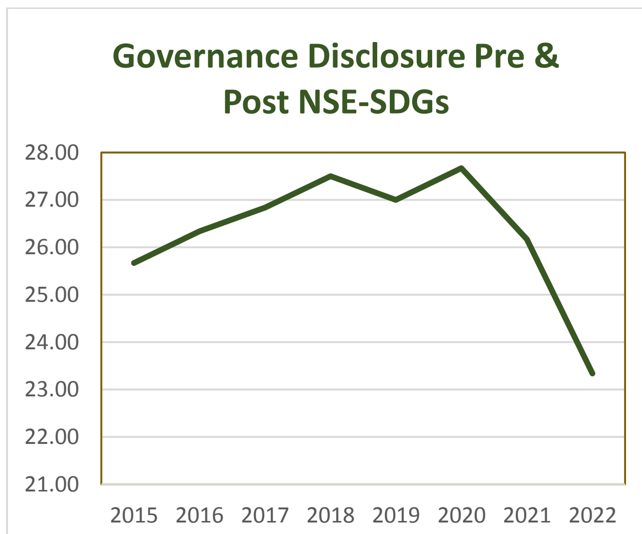
Table 4: Descriptive Statistics

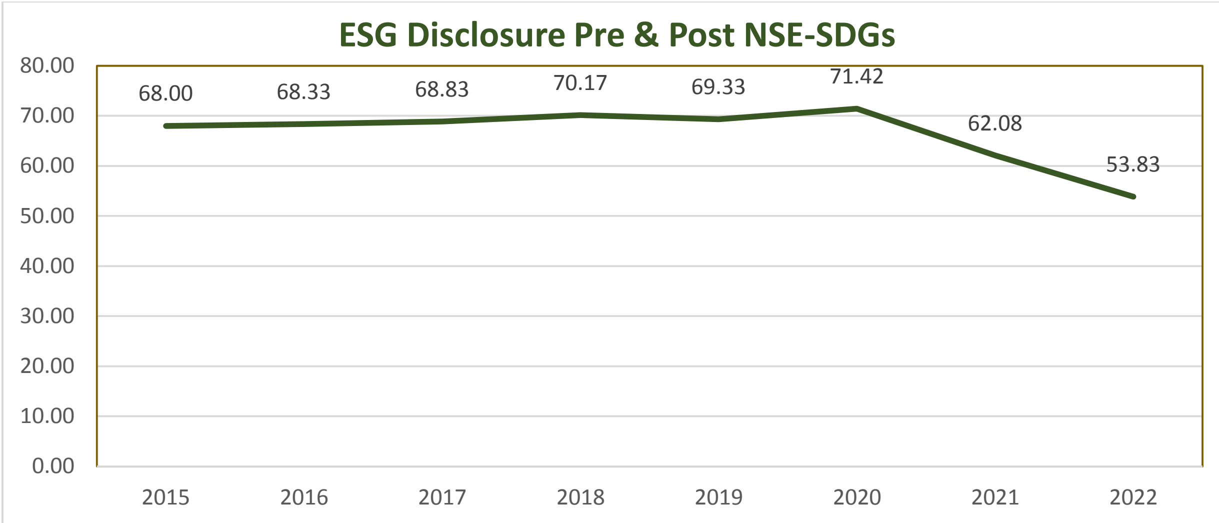
	N	Minimum	Maximum	Mean	Std. Deviation
ESG Disclosure	208	0	10	6.77	1.620
Environmental Disclosure score	208	0	3	.05	.343
Social Disclosure score	208	0	7	6.46	1.506
Governance Disclosure score	208	0	1	.26	.439
Valid N (listwise)	208				

Source:

The result in Table 4 shows descriptive statistics of the ESG disclosure data for the period. The result revealed that ESG disclosure of manufacturing firms listed on NGX deviated significantly from the average. The deviation is shown from the maximum score of 10 obtained from the 55 points per firm with a mean score of 6.77. Individually, environmental disclosure score showed a maximum of 3 out of 55 with a mean value of 0.05. The variation for environmental disclosure and governance disclosure was significant as the standard deviation is higher than the mean value, while the deviation for social disclosure was insignificant.







Source: Authors' analysis

Generally, the trend in the ESG disclosure of listed manufacturing companies in Nigeria pre (2015-2018) and post (2019-2022) NGX SDG showed a decline with the highest disclosure rate of 71.42% in 2020 and the lowest at 53% in 2022.

Table 5: ANOVA for ESG disclosure

		Sum of Squares	df	Mean Square	F	Sig.	Decision
Social Disclosure Index	Between Groups	1.970	1	1.970	40.067	.000	
	Within Groups	17.209	350	.049			(p<0.05) Supported
	Total	19.179	351				
Governance Disclosure Index	Between Groups	.197	1	.197	3.226	.073	
	Within Groups	21.406	350	.061			(p>0.05) Not supported
	Total	21.603	351				
Environmental Disclosure Index	Between Groups	.021	1	.021	4.949	.027	
	Within Groups	1.520	350	.004			(p<0.05) Supported
	Total	1.541	351				
ESG	Between Groups	2.894	1	2.894	17.479	.000	(p<0.05) Supported
	Within Groups	57.948	350	.166			
	Total	60.842	351				

The result of the inferential statistics in Table 5 shows the level of ESG disclosure at different periods, that is, prior to the NGX SDG (2015-2018) and post NGX SDG (2019-2022). The result showed that the F-statistic is 17.479, and the associated p-value is < .000. This indicates that there are statistically significant differences in the overall ESG Disclosure Index between the pre and post periods. Individually, the result indicates that the F-statistic is 4.949, and the associated p-value is .027 (< .05). This indicates that there are statistically significant differences in the Environmental Disclosure Index between the pre and post periods. Also, it is revealed that the F-statistic is 40.067, and the associated p-value is < .000 (essentially zero).

This indicates that there are statistically significant differences in the Social Disclosure Index between the pre and post periods. In contrast, the F-statistic is 3.226, and the associated p-value is .073 (> .05). This suggests that there are statistically insignificant differences in the Governance Disclosure Index between the pre and post periods, although it is worth noting that the p-value is close to the significance threshold.

DISCUSSION OF RESULTS

The findings of this study showed that ESG disclosure level of listed manufacturing firms in Nigeria is low. On a scale of 100, the disclosure had a consistent downward slope from 2019. This is expected considering the voluntary nature of sustainability reporting in Nigeria. The drop could also be attributed to companies' inconsistent disclosure. This finding could be validated by KPMG (2022) report that Nigeria's sustainability reporting rate for N100 companies decreased by 7% between 2020 (85%) and 2022 (78%).

However, as Iredele and Moloi (2020) stated, the regulatory framework in a country influences the rate of sustainability disclosure practice. Consequently, the establishment of the NGX SDG is expected to advance ESG reporting among listed companies in Nigeria. Nonetheless, there is a decline compared to the disclosure level prior to the NGX-SDG. The voluntary nature of the NGX SDG makes disclosure of ESG in companies integrated reports below expectation.

Previous studies show similar submission. Umoren et al. (2015) study on ESG practice after IFRS adoption showed that only 53% of listed Nigeria companies reported ESG as at 2013 and 2014 with governance being the most disclosed and environmental the least disclosed. This study reports same result 10 years after. It is thus clear that the adoption of NSE-SDG has not significantly influenced ESG disclosure among manufacturing firms listed on the NGX.

It is worthy to note in line with the submission of Iredele and Moloi (2020), that the decline in ESG disclosure as observed in the findings of this study could be traced to the methodology adopted which preferred quality to quantity of ESG information reported by companies. Quality is described as comprehensive information relevant to investors and stakeholders.

A six-point rating scale was employed to measure the quality of disclosure, which ranged from 0, where the item was 'not mentioned' to 5 for 'significant disclosure'. In addition, the ESG checklists adopted were based on a checklist covering 11 ESG indicators derived from the NGX SDG. It follows, therefore, that the present study evaluated ESG in line with indigenous policies.

As shown in Figure 1, the increase in ESG disclosure in 2018 may not be unconnected with the release of the 2018 Code of Corporate Governance (CCG) which sought to institutionalize best practices in Nigeria which applies to public companies. Listed companies tended to disclose more governance information as a result of the release of the CCG. This may have engineered the increase in ESG disclosure.

CONCLUSION

This study undertook a comparative analysis of ESG disclosure practices among manufacturing companies listed on the NGX, focusing on the periods before (2015-2018) and after (2019-2022) the implementation of the NGX SDG. The findings shed light on the state of ESG disclosure in Nigeria and its responsiveness to regulatory initiatives aimed at promoting sustainability reporting.

The results revealed a significant decline in ESG disclosure levels among listed manufacturing firms over the study period. Despite the introduction of the NGX SDG, which aimed to enhance transparency and accountability through voluntary sustainability reporting. The trend in disclosure rates exhibited a consistent downward slope from 2019 onwards. This decline may be attributed to various factors, including the voluntary nature of sustainability reporting in Nigeria, inconsistent disclosure practices among companies, and the absence of stringent regulatory enforcement mechanisms.

The findings also underscored the critical role of regulatory frameworks in influencing the rate of sustainability disclosure practices. While the establishment of the NSE SDG was expected to advance ESG reporting among listed companies, the observed decline suggests that voluntary guidelines may not be sufficient to drive meaningful improvements in disclosure practices. The findings align with previous studies indicating challenges in ESG reporting within the Nigerian context, highlighting persistent gaps in ESG disclosures despite regulatory interventions.

Moreover, the study's methodology, which prioritized the quality of ESG information over quantity, revealed insights into the nature of disclosure practices among manufacturing firms. By employing a six-point rating scale to measure the quality of disclosure, the study emphasized the importance of comprehensive and relevant information for investors and stakeholders. This approach, based on indigenous policies such as the NSE-SDGs, provided a nuanced understanding of ESG disclosure dynamics within the Nigerian market.

In light of these findings, several implications emerge for both researchers and practitioners. Firstly, there is a need for enhanced regulatory oversight and enforcement mechanisms to encourage more robust ESG disclosure practices among listed companies. While voluntary guidelines play a role, regulatory interventions may be necessary to ensure compliance and promote transparency.

Secondly, stakeholders, including investors, policymakers, and civil society organizations, should advocate for greater transparency and accountability in ESG reporting. By engaging with companies and regulatory authorities, stakeholders could contribute to the development of more rigorous reporting standards and practices.

In conclusion, this study underscores the importance of ESG disclosure as a key component of corporate transparency and accountability. By examining the nuances of disclosure practices within the Nigerian context, the study contributes to broader discussions on sustainability reporting and regulatory interventions in emerging markets. Despite the challenges observed, there is potential for meaningful progress towards more transparent and responsible business practices, driven by concerted efforts from stakeholders and policymakers alike.

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FIRM ATTRIBUTES AND FIRM VALUE OF LISTED OIL AND GAS FIRMS IN NIGERIA: MODERATING ROLE OF DIRECTOR INTERLOCKING

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Abstract
This study examined the relationship between firm attributes and value of listed oil and gas companies in Nigeria, with a particular focus on the moderating role of director interlocking. The study adopted expo-facto and correlational research design. This design was chosen due to its suitability for investigating relationships between variables without manipulating them. The data for the study was extracted from annual reports and accounts of the entire nine oil and gas firms. The findings revealed that profitability (ROA) and firm growth have a positive and significant effect on firm value; firm size has a positive but insignificant effect on firm value; however, it strengthens the positive relationship between profitability and firm size with firm value. Conversely, the moderating effect on leverage and sales growth is insignificant. Director interlocking has a negative direct effect on firm value but positively moderate ROA and firm size. The study recommended that the Nigerian Exchange Group (NGX) among others should introduce regulations that establish clear guidelines for the number of boards positions a director could hold concurrently. This could be achieved through legislative amendments to the Companies and Allied Matters Act (CAMA) 2020 and Financial Reporting Council of Nigeria (FRCN) Code of Corporate Governance 2018.

Key words: Profitability, Firm Growth, Firm Value Firm Size

INTRODUCTION

Firm value is the most important consideration when determining the financial health of a firm or business or acquiring its property (Rabiu, 2019). The higher the value of a company, the better the company's financial position and the better the prospects for potential investors. In today's business world, enterprise value indicates the extent to which investors and stakeholders are maximizing their wealth. This is because they are interested in the return on their investment and this could be achieved if the organization's resources are fully and properly utilized (Jeroh, 2020; Tanko, 2023). Therefore, this serves as a basis for aspiring investors and financial service providers to invest more in the business. Specifically, Ighosewe and Ehimatie (2021) opined that company values are of dynamic importance for economic development. In this regard, investors need high returns on their investments and well-organized managers who could bring the monitored company performance to the long-term for their stakeholders and investors. Importantly, enterprise value is an economic measure of business performance that could be used to determine the value of businesses and economic resources (Hameed & Tsoho, 2020).

In addition, some internal factors that affect a firm value are also known as firm attributes. Firm attributes play a significant role in shaping a company's profitability and are essential in predicting company value (Handoko, 2016). Firm attributes typically include company size, growth, liquidity, profitability, leverage and interest coverage ratio, investment opportunities, profitability, risk and tangibility. Others are company age and size, cash flow, dividends, leverage, operating costs and internal governance mechanisms (Abdullahi, 2016; Hassan & Ahmed, 2013). Ragab and Omran (2006) as by Lawan et al. (2023) argued that sound firm attributes have become important factors in considering local and foreign investors in international comparisons. As companies struggle to compete competitively in local and global markets, their respective interactions with existing financial markets and of course the investment community have also seen a significant increase. To date, research has consistently mandated the increased and continued use of accounting information to communicate business value and well-being in a practical and effective manner.

Again, firm attributes play a significant role in shaping the value of firms. For listed oil and gas firms in Nigeria, firm attributes, such as profitability, liquidity, leverage, size, and age are essential determinants of firm value (Tanko et al., 2023). Also, high profitability signifies efficient resource utilization and potentially attracts investors, leading to higher firm value (Ali et al., 2020). Also, moderate debt usage (leverage) may amplify returns, but excessive debt increases financial risk, potentially decreasing firm value (Olokoyo et al., 2021). Similarly, consistent growth indicates expansion and future potential, often translating to higher firm value (Ali et al., 2020; Oyewunmi & Akinwale, 2020). Large firms may benefit from economies of scale and brand recognition, potentially enhancing firm value.

The importance of these firm attributes in determining firm value has been widely discussed in the literature, and various studies have examined their impact on firm performance (Ali et al., 2020; Olokoyo et al., 2021; Oyewunmi & Akinwale, 2020). However, despite the extensive literature on firm attributes and firm value, the role of director interlocking in moderating the relationship between these two constructs has not been explored. Director interlocking is a phenomenon in which an individual serves as a director on the board of more than one company (Yartey et al., 2021). The practice of interlocking is widespread in Nigeria, particularly in the oil and gas industry, where directors often serve on the boards of multiple firms. The rationale behind director interlocking is that it enables companies to share resources and knowledge, facilitates the flow of information between firms, and enhances cooperation among companies (Bai et al., 2019; Yartey et al., 2021).

Interlocking board memberships could create information sharing networks, enhance access to resources, and improve corporate governance, potentially impacting firm value positively. Consequently, the presence of interlocking directors creates a network of shared connections and knowledge, which could enhance transparency and information sharing which might lead to better decision-making by management, ultimately improving profitability and firm value, and facilitating access to resources. Interlocked directors might share valuable resources and connections, aiding firm growth and potentially increasing value. This might improve corporate governance. Interlocking memberships could foster best practices and mitigate agency problems, potentially bolstering firm value.

The Nigeria Exchange Group (NGX) provides a convenient market for investors intending to buy their securities and investors intending to sell their securities, thus providing liquid financial instruments (Jeroh, 2020; Tanko & Siyanbola, 2020). NGX listed companies expect financial stability to earn investor confidence and contribute to economic growth. Although most of the companies listed on the NGX have improved their performance, others have suffered a decline in assets and others have been delisted, mainly due to a mix of weaknesses in corporate governance and firm attributes, a troubled economy and over-indebtedness (Jeroh, 2020).

Remarkable empirical evidence from both developed and emerging markets (Abor et al., 2018; Adamu et al., 2019; Hong et al., 2019; Mohammed & Kurawa, 2021; Qi et al., 2014) suggest the existence of a linear relationship between selected company attributes and firm value as measured by company security/stock prices. Studies in this area in particular have been termed value relevance studies and have focused primarily on the presumed statistical relationship between Tobin's Q, companies' share price and earnings and book value per share. Results from previous studies have proven mixed and conflicting (Abor et al., 2018; Adamu et al., 2019; Hong et al., 2019; Mohammed & Kurawa, 2021). Additionally, not much emphasis has been placed on establishing the linear relationship between several measures of firm attributes that include additional accounting information such as liquidity, firm structure, board attributes, profitability, leverage capital structure metrics and firm value. More importantly, no study has examined the moderating effect of director interlocking on this relationship. As a result of mixed findings (Abor et al., 2018; Adamu et al., 2019; Hong et al., 2019; Mohammed & Kurawa, 2021), this study assessed the moderating effect of director interlocking on the relationship between firm attributes and value of companies with emphasis on listed oil and gas companies which has not been investigated.

LITERATURE REVIEW

Wang et al. (2019) investigated the relationship between profitability and firm value in the Chinese pharmaceutical industry. The study aimed to identify the impact of profitability on the market value of Chinese pharmaceutical firms. The study used panel data analysis to examine the relationship between profitability and firm value. The sample size consisted of 87 Chinese pharmaceutical firms over the period from 2013 to 2017. The study used return on assets (ROA), return on equity (ROE), and net profit margin (NPM) as measures of profitability and market value as a measure of firm value.

The study found a positive and significant relationship between profitability and firm value. The results indicated that an increase in profitability led to an increase in firm value. The study also found that the relationship between profitability and firm value was stronger for firms with higher research and development (R&D) intensity. Additionally, a study by Singh and Jain (2019) using a sample of Indian firms found that profitability is positively related to firm value. These findings suggest that profitability is an important determinant of firm value.

Alharbi and Ahmad (2019) conducted a study in Saudi Arabia that aimed to investigate the impact of firm size on firm value for firms listed on the Saudi Stock Exchange. The authors used a sample of 145 firms and employed panel data regression analysis. Their findings revealed that there is a positive relationship between firm size and firm value, indicating that larger firms tend to have higher market values.

Kabiru et al. (2019) examined the impact of company attributes on firm value of listed consumer goods sector in Nigeria covering the period of 2005 to 2014 using secondary source of data. The data generated was tested using Shapiro Wilk Test and Hausman Test. The data of the study was analysed in a random effects model of regression analysis using STATA 11.1 software package. The study found out that firm leverage has a positive relationship with firm value of the studied companies but the relationship was not significant.

Kabiru et al. (2019) examined the impact of company attributes on firm value of listed consumer goods sector in Nigeria covering the period of 2005 to 2014 using secondary source of data. The data of the study was analysed in a random effects model of regression analysis. The study revealed that firm growth and firm size have positive and significant impact on firm value of the sampled listed consumer goods companies in Nigeria.

Shuaibu et al. (2019) examined the impact of company attributes and firm value of listed insurance companies in Nigeria and established that firm size has a significant positive relationship with firm value. Similarly, Alam et al. (2020) investigated the relationship between firm size and firm value in the context of Nigerian firms. Using a sample of 105 firms, they employed the OLS regression analysis and found no significant relationship between firm size and firm value.

Another study by Nimalathasan (2019) investigated the relationship between firm size and firm value in the Sri Lankan context. The objective of the study was to determine whether the relationship between firm size and firm value was different for firms listed on the Colombo Stock Exchange. Nimalathasan (2019) used a sample of 250 firms listed on the Colombo Stock Exchange from 2007 to 2016. The study used panel data regression analysis to examine the relationship between firm size, measured by total assets, and firm value, measured by market capitalization. The findings of the study showed that there is a positive relationship between firm size and firm value. The results suggested that larger firms tend to have higher firm values, and this relationship was found to be significant in the Sri Lankan context.

Yang et al. (2020) investigated the relationship between profitability and firm value in the United States (US) technology sector. The study identified the impact of profitability on the market value of US technology firms. The study used panel data analysis to examine the relationship between profitability and firm value. The sample size consisted of 157 US technology firms over the period from 2013 to 2018. The study used ROA, ROE, and NPM as measures of profitability and market value as a measure of firm value. The study found a positive and significant relationship between profitability and firm value. The results indicated that an increase in profitability led to an increase in firm value. The study also found that the relationship between profitability and firm value was stronger for firms with higher growth opportunities.

Chen et al. (2020) investigated the relationship between profitability and firm value in the Chinese renewable energy industry. The study aimed to identify the impact of profitability on the market value of Chinese renewable energy firms. The study used panel data analysis to examine the relationship between profitability and firm value. The sample size consisted of 68 Chinese renewable energy firms over the period from 2014 to 2018. The study used ROA, ROE, and NPM as measures of profitability and market value as a measure of firm value. The study found a positive and significant relationship between profitability and firm value. The results indicated that an increase in profitability led to an increase in firm value. The study also found that the relationship between profitability and firm value was stronger for firms with higher growth opportunities.

Hearn et al. (2020) investigated the impact of directors interlocking on firm value in the United Kingdom (UK). The study used a sample of 209 FTSE 350 listed firms in the UK from 2008 to 2017. The authors employed regression models to examine the relationship between directors interlocking, measured by the number of interlocking directorates, and firm value, measured by Tobin's Q. The study found a positive relationship between directors interlocking and firm value. The authors also found that the positive relationship was stronger for firms with higher levels of Research and Development (R&D) expenditure.

Liu et al. (2020) evaluated the relationship between directors' interlocking and firm value in the context of Chinese firms. The study used a sample of 1,380 Chinese listed firms from 2010 to 2017. The study measured directors' interlocking by the number of outside directorships held by each director in other firms, and firm value was measured by Tobin's Q. The study employed regression analysis to test the relationship between directors' interlocking and firm value. The study found a U-shaped relationship between directors' interlocking and firm value. The results showed that moderate interlocking had a positive effect on Tobin's Q, while high interlocking had a negative effect on Tobin's Q. This indicated that directors' interlocking could have both positive and negative effects on firm value, depending on the level of interlocking.

Xu et al. (2020) investigated the impact of directors interlocking on firm value in the Chinese market. The study used a sample of 1,583 Chinese firms listed on the Shanghai and Shenzhen Stock Exchanges from 2009 to 2017. The researchers used regression analysis to test the relationship between directors interlocking and firm value, while controlling for other variables such as board independence, CEO duality, and industry effects. The study found a positive relationship between directors interlocking and firm value in the Chinese market. The results suggest that directors who serve on multiple boards could bring valuable knowledge and resources to their firms, which could enhance firm value.

Li and Li (2021) investigated the effect of directors' interlocking on firm value in the Chinese context. The objective of the study was to determine whether the relationship between directors' interlocking and firm value was different for firms listed on the Shanghai Stock Exchange. The study used a sample of 356 listed firms on the Shanghai Stock Exchange from 2011 to 2018. The study used panel data regression analysis to examine the relationship between directors' interlocking, measured by the number of shared directors on the board of two firms, and firm value, measured by market-to-book ratio. The findings of the study showed that there is a positive relationship between directors' interlocking and firm value. The results suggested that directors' interlocking is associated with higher firm values, and this relationship was found to be significant in the Chinese context.

Duygun et al. (2021) investigated the relationship between leverage and firm value in European banks. The study used a sample of 86 European banks and employed panel data regression analysis. The results indicated that leverage has a positive effect on firm value, suggesting that debt could enhance the market value of banks. Alazzani et al. (2021) also investigated the relationship between leverage and firm value in Saudi Arabia. The study used a sample of 105 listed companies and employed the panel data regression analysis. The results indicated that leverage has a negative effect on firm value, suggesting that companies with high levels of debt have a lower market value.

Reda and El-Said (2021) investigated the impact of leverage on firm value in Egypt. The study used a sample of 67 listed companies and employed the ordinary least squares regression method. The results indicated that leverage has a negative effect on firm value, suggesting that companies with high levels of debt have a lower market value. Qiu et al. (2021) investigated the relationship between firm size and firm value in the Chinese pharmaceutical industry. They employed a combination of panel data analysis and fixed-effects regression analysis and found a positive and significant relationship between firm size and firm value.

Raza et al. (2021) examined the relationship between profitability and firm value in the Pakistani manufacturing sector. The study aimed to identify the impact of profitability on the market value of Pakistani manufacturing firms. The study used panel data analysis to examine the relationship between profitability and firm value. The sample size consisted of 135 Pakistani manufacturing firms over the period from 2013 to 2018. The study used ROA, ROE, and NPM as measures of profitability and market value as a measure of firm value. The study found a positive and significant relationship between profitability and firm value. The results indicated that an increase in profitability led to an increase in firm value. The study also found that the relationship between profitability and firm value was stronger for firms with lower leverage.

Furthermore, Wu et al. (2021) evaluated the effect of profitability on firm value in the US software industry. The study aimed to identify the impact of profitability on the market value of US software firms. The study used panel data analysis to examine the relationship between profitability and firm value. The sample size consisted of 68 US software firms over the period from 2013 to 2018. The study used ROA, ROE, and NPM as measures of profitability and market value as a measure of firm value. The study found a positive and significant relationship between profitability and firm value. The results indicated that an increase in profitability led to an increase in firm value. The study also found that the relationship between profitability and firm value was stronger for firms with higher growth opportunities.

Mohammed and Kurawa (2021) also investigated how firm attributes influence the value of listed insurance companies in Nigeria. They relied on a secondary data of fifteen (15) insurance firms (out of twenty-seven) from 2009-2018 (10 financial years). The study made use of dual market performance measures of market price per share and Tobin’s Q. Using the panel regression technique, their result showed that, while firm size has an inverse significant relationship with firm value, board gender diversity has non-significant negative impact on firm value. Sanni et al. (2020) found that higher firm sizes increase performance, and both sampled the insurance companies apiece. The conflicting evidence buttresses the need for further studies.

Huang et al. (2022) investigated the impact of directors' interlocking on firm value in the context of the Chinese banking industry. They used a sample of Chinese listed banks and found that directors' interlocking had a positive and significant impact on firm value. On the other hand, Kim et al. (2022) examined the influence of liquidity on firm value in the Korean manufacturing sector. The study aimed to identify the impact of liquidity on the market value of Korean manufacturing firms. The study used panel data analysis to examine the relationship between liquidity and firm value. The sample size consisted of 1,169 Korean manufacturing firms over the period from 2013 to 2018. The study used current ratio, quick ratio, and cash ratio as measures of liquidity and market value as a measure of firm value. The study found a positive and significant relationship between liquidity and firm value. The results indicated that an increase in liquidity led to an increase in firm value. The study also found that the relationship between liquidity and firm value was stronger for smaller firms compared to larger firms.

El-Ansari et al. (2022) investigated the impact of leverage on firm value in the context of the United Arab Emirates. The study used a sample of 70 listed companies and employed the ordinary least squares regression method. The results indicated that leverage has a negative effect on firm value, suggesting that companies with high levels of debt have a lower market value. Li et al., (2022) evaluated the effect of liquidity on firm value in the Chinese service industry. The study aimed to identify the impact of liquidity on the market value of Chinese service firms. The study used panel data analysis to examine the relationship between liquidity and firm value. The sample size consisted of 410 Chinese service firms over the period from 2014 to 2019. The study used current ratio, quick ratio, and cash ratio as measures of liquidity and market value as a measure of firm value. The study found a positive and significant relationship between liquidity and firm value. The results indicated that an increase in liquidity led to an increase in firm value. The study also found that the relationship between liquidity and firm value was stronger for firms with higher growth opportunities.

Park and Park (2022) examined the impact of firm growth on firm value in the context of South Korea. The study used a sample of 383 listed companies and employed the ordinary least squares regression method. The results indicated that firm growth has a positive effect on firm value, indicating that companies with higher growth rates have a higher market value. Ossouli et al. (2022) examined the impact of firm growth on firm value in the context of Iran. The study used a sample of 88 listed companies and employed the ordinary least squares regression method. The results indicated that firm growth has a positive effect on firm value, indicating that companies with higher growth rates have a higher market value.

METHODOLOGY

This study adopts expo-facto and correlational research design. This design chosen due to its suitability for investigating relationships between variables without manipulating them. It allows the study to examine the direction and strength of the associations between firm attributes, director interlocking, and firm value without making causal claims. The study used the entire nine listed oil and gas firms on the floor of Nigerian Exchange Group (NGX).

Table 1: Variables and Measurement

Variables	Measurement	Type	**Symbols**	Source
Firm value	Share price at closing date	Dependent	FV	Rabiu (2019)
Profitability	Profit before interest and tax divide by total assets	Independent	ROA	Rimziya and Jariya (2022); Tanko (2020); Ayuba et al. (2018)
Leverage	Interest bearing debt divided by total equity	Independent	DER	Idris and Bala (2015); Adamu et al (2019)
Firm growth	Current sale less previous sale divide	Independent	SGW	Rimziya and Jariya (2022)

	by previous sale			
Firm Size	Log of total assets	Independent	FSZ	Rimziya and Jariya (2013); Ayuba et al (2018)
Director interlocking	Numbers of directors serving in more than one board of different companies	Moderating	DI	Rabiu (2020); Rimziya and Jariya (2022)

Source: Researcher's Compilation (2024)

The study used only secondary data collected from the annual reports and accounts of oil and gas firms listed on the NGX from 2012 to 2022. The study employed Generalised Least Square (GLS) analysis to examine the relationship between firm attributes, directors' interlocking, and firm value (Mohammed & Kurawa, 2021) and descriptive statistics was used to described the data. The models adopted for this study is represented as equation below:

FV=(ROA, DER, SGW, FSZ, ID)

$$FV_{it} = \beta0_{it} + \beta1\text{ROA}_{it} + \beta2\text{DER}_{it} + \beta3\text{SGW}_{it} + \beta4\text{FSZ}_{it} + \varepsilon_{it}$$

$$FV_{it} = \beta0_{it} + \beta1\text{ROA}_{it} + \beta2\text{DER}_{it} + \beta3\text{SGW}_{it} + \beta4\text{FSZ}_{it} + \beta5\text{DI}_{it} + \varepsilon_{it}$$

$$FV_{it} = \beta0_{it} + \beta1\text{ROA}_{it} + \beta2\text{DER}_{it} + \beta3\text{SGW}_{it} + \beta4\text{FSZ}_{it} + \beta5\text{DI}_{it} + \beta6\text{ROA}_{it} * DI_{it} + \beta7\text{DER}_{it} * DI_{it} + \beta8\text{SGW}_{it} * DI_{it} + \beta9\text{FSIZ}_{it} * DI_{it} + \varepsilon_{it}$$

Where:

FV_{it} = firm value of firm i at time t
ROA_{it} = return on assets of firm i at time t
DER_{it} = debt-to-equity ratio of firm i at time t
SGW_{it} = sale growth of firm i at time t
FSZ_{it} = firm size of firm i at time t
DI_{it} = directors' interlocking of firm i at time t
β0= Constant or intercept
β1- β9= Beta coefficients to be estimated.
*= interaction
ε = error term

RESULTS AND DISCUSSION

The descriptive statistics provide an overview of the variables used in the analysis. The mean, standard deviation, minimum, and maximum values of the variables are presented. These statistics offer insights into the distribution and characteristics of the data. Table 2 displays the calculated values for the mean, the standard deviation, the minimum and the maximum for each of the research variables for the 9 sampled oil and gas firms during the period of the study from 2012 to 2022. The table also shows that the study used 99 firm-year observations for firm value, ROA, DER, SGW, firm size and director interlocking.

Table 2: Descriptive Statistics

Variables	Observations	Mean	Std. Dev.	Minimum	Maximum
FV	99	39.4691	61.8368	0.2	290
ROA	99	-0.0076	0.1690	-0.9941	0.5231
DER	99	0.3112	0.3708	-0.8246	0.9845
SGW	99	0.8559	1.4241	0.0100	7.4675
FSize	99	17.3047	2.3291	8.4585	21.1817
DI	99	2.0909	2.3780	0	7

Note. Stata 14 output based on data extracted from listed oil and gas firms from 2012-2022.

Table 2 shows that on average firm value is at ₦39.4691 while the standard deviation stood at ₦61.8368. This suggest a wide variation around the mean since the standard deviation is far higher than the mean. This is supported by maximum of ₦290 and minimum value of ₦0.2.

More so, the table shows that the average ROA for the listed oil and gas firms is -0.0076 which indicates that on average oil and gas firms recorded a loss of -0.76%. Also, the table shows a minimum loss of 99.41% and a maximum profit of 52.31% with a standard deviation of 0.1690 which is 16.90%. This indicates wide variation around the mean. Similarly, the low mean profitability of listed oil and gas firms indicates poor performance on average. Also, the minimum of -99.41% is the loss of ₦8,720,338, 000 incurred by Japaul Gold & Ventures Plc in 2022 against total assets of ₦8,772,295,000. This is a confirmation of the year 2022 poor performance of some firms in the sector.

The mean financial leverage of the sampled firms is 0.3112. This indicates that on average the sampled firms used about 31% of debt to finance their business while 69% of their business was financed by equity. The standard deviation of 0.3707 shows that the financial leverage of the firms is widely dispersed around the mean since the standard deviation is greater than the mean. The minimum is -0.8246 and the maximum of 0.9845. The negative minimum is as a result of the high gearing of Oando Plc which is at ₦106,199,440 against funds attributed to shareholders which are at a negative value of ₦128,782,290 in 2019. The negative equity is as a result of accumulated losses which reduced the funds attributed to shareholders. The maximum is as a result of high gearing of ₦15,682,926 against shareholder funds of ₦15,930,170 contracted by Total Energies Marketing Nigeria Plc in 2014.

Concerning firm growth, Table 2 further reveals that on average, the sampled firms experienced high growth in sale with a mean of 0.8559. The minimum value of 0.0100 shows that some of the firms in the sample experienced a slow growth in sale from one year to the other during the period of this study. The maximum value of 7.4675, when compared with the minimum value, represents a range of 7 times. In addition, the standard deviation of 1.4241, which is higher than the mean value, attests to wide variation in the sale growth among the firms in the sample.

The table also provides evidence that on average, the firm size is ₦17.3047 with a minimum value of ₦8.4585 and a maximum value of ₦21.1817. The minimum and maximum values are assets of Rak Unity Petroleum Plc and Seplat Energy Plc in 2012 and 2022 respectively. The standard deviation is ₦2.2391 which points to the fact that there is wide variation among the sampled firms. Similarly, directors interlocking has a mean of 2.0909 with a standard deviation of 2.3780, which implies that there is a wide variation of the sampled directors interlocking. The minimum and maximum values stood at 0 and 7 respectively.

Table 3: Correlation Matrix

VAR.	FV	ROA	DER	SGW	FSZ	DI	VIF
FV	1.0000						
ROA	0.4608	1.0000					1.18
DER	0.0927	0.1163	1.0000				1.07
SGW	-0.4205	-0.3878	-0.1746	1.0000			1.35
FSZ	0.7386	0.3354	0.2183	-0.3161	1.0000		1.48
DI	0.2899	0.2253	0.3038	-0.1817	0.5015	1.0000	1.33

Note. Stata 14 output based on data extracted from listed oil and gas firms from 2012 - 2022

Table 3 shows the correlation coefficients between the dependent variable and the independent variables in the study. Furthermore, it shows the correlation matrix with the values displaying the Spearman correlation coefficient between all the pairs of the research variables. The choice of the Spearman correlation, over the Pearson correlation, is because the outcome of Shapiro Wilk test for normality indicates that the data are not normally distributed. The Shapiro Wilk test for all the variables is 0.0000 which is significant at a 1% level of significance.

Table 3 shows that firm value associates positively with ROA, DER, firm size and directors interlocking between 2012 to 2022 at correlation coefficients of 0.4608, 0.0927, 0.7386, and 0.2899 respectively. However, the correlation coefficient of 9% and 29% for DER and director interlocking indicates the existence of a weak direct relationship between the two study variables and firm value, while the coefficient value of 46% for ROA indicates moderate association and 74% for firm size indicates strong association. The results of the correlation also suggests that profitability, financial leverage, firm size, directors interlocking and firm value move in the same direction. This also implies that an increase in the four variables would lead to an increase in firm value.

On the other hand, Table 3 reveals that the sign of the pairwise correlation coefficient between the firm value and sale growth is negative at correlation coefficient values of -0.4208. Suggesting that the higher the value of sales, the lower the propensity to reduce firm value. However, the low correlation coefficient of 48% points to the fact that sale growth correlates moderately with firm value. Also, sale growth and firm value move in a separate direction. Generally, the correlation coefficient of the interrelationship among the explanatory variables does not present a pointer of harmful multicollinearity. This is supported by Variance Inflation Factor (VIF) which are less than 10. The lowest VIF is 1.07 for DER and the highest VIF is 1.48 for firm size.

Regression Diagnostic Tests

The study conducted several diagnostic tests to ensure the validity and reliability of the regression models. These tests include normality test, heteroscedasticity test, multicollinearity test, linearity test, model specifications test, Hausman specifications test, and Langrangian multiplier test.

Table 4: Shapiro-Wilk W test for normality Dependent Variable Residuals

Variable	Observation	W	V	Z	Prob>z
Model 1	99	0.97921	1.339	0.637	0.26215
Model 2	99	0.98891	1.131	0.491	0.41091
Model 3	99	0.98707	1.253	0.506	0.30643

Note. STATA 14.0 Output

The study uses the Shapiro Wilk test, which hypothesis that the error term in the distribution is normally distributed. The result as displayed in Table 4 shows that the p-value for the models is insignificant, indicating that the residuals are normally distributed. The study uses a linktest to detect model specification errors likely attributable to the research variables. This is because the linktest can detect misspecification errors relating to omitted variables and check the exactness of link function specification in the model.

Table 5: Linktest Result for Model Specification

Model One				**Model Two**			**Model Three**		
Variables	Coeff.	T	p>t	Coeff.	T	p>t	Coeff.	T	p>t
_hat	0.3856	1.66	0.100	0.4175	2.22	0.029	0.3438	1.60	0.112
_hatsq	0.0128	0.11	0.567	0.0104	0.09	0.965	0.0101	0.80	0.210
_cons	-8.2024	-0.97	0.334	-6.4702	-0.91	0.366	-3.3956	-0.49	0.628

Note: STATA 14 Output

The results from the linktests on Table 5 show that the _hatsq that are not significant at 5% threshold. Thus, it is apt to say that the research models have been properly specified in line with the classical linear regression model (CLRM) assumptions.

Multicollinearity

The correlation coefficients and variance inflation factor (VIF) in Table 6 shows that there is an absence of harmful relationship among the predictors. The highest VIF is 1.48 for firm size and minimum VIF is 1.07 for DER. In addition, the correlation matrix also shows absence of multicollinearity since none of the explanatory has relationship of 0.8.

Homoscedasticity of the Residuals

One of the assumptions of the CLRM is the homogeneity of variance (homoscedasticity) of the residuals, i.e., the error variance should be constant for all values of explanatory variables. The study uses Breusch–Pagan–Godfrey Test to affirm the compliance of the research model with the assumption. The results obtained from the Breusch-Pagan-Godfrey test for heteroscedasticity for models one, two and three all show p-value of 0.0000 as shown in Table 6. The results show that the probability value is significant at 1%, which implies that the variance of the residuals is not constant in all the models. The study employed the robust random effect for models one and two while robust OLS for model three in order to solve the problem.

Hausman Specification Test

The study uses the Hausman Specification Test to examine the presence of endogenous explanatory variables in the models because of its potential to cause the OLS estimators to fail. The Hausman Specification tests were carried out in models one, two and three of the study to choose a more consistent estimator between the Panel Least Square (PLS) fixed and random effect. The results presented in Table 6 shows that in models one and two, unique error is not correlated with the regressors because the chi-square probability is 0.7925, 8447 and 0.3426 for models one, two and three respectively, which is insignificant.

Breusch-Pagan Langrangian Multiplier Test for Random Effects

The study uses the Breusch and Pagan Langrangian Multiplier (BPLM) test for random effects to choose between OLS and a random effect for the models one, two and three, since the Hausman results for both models are insignificant. Random effects assume that the change across entities is random and not correlated with the independent variables included in the model. Table 6 shows that the result was presented in favour of the random effects for models one and two estimation since the probability values of the chi-square are 0.0000 and 0.0000 while model three is in favour of OLS since the P-value stood at 1.0000, model three was interpreted using robust OLS estimate.

Panel Regression Analysis

Table 6 shows that the overall R-square value is 0.2103, 0.2244 and 0.3518 for models one, two and three respectively. R-square, also known as the coefficient of determination, represents the proportion of the dependent variable's variance that is explained by the independent variables in the regression model. In this case, the R-square value of 0.2103, 0.2244 and 0.3518 indicates that approximately 21.03%, 22.44% and 35.18% of the variance in the value could be explained by the independent variables (ROA. DER, SGW, FSZ, DI with their interaction) in models one, two and three.

Table 6: Panel Regression Results

	Model one				Model two			Model three	
Variables	Coef.	Z	P>|z|	Coef.	Z	p>/z/	Coef.	T	P>|t|
Constants	4.5362	2.46	0.042**	1.3637	2.24	0.033**	-178.0328	3.41	0.001*
ROA	18.7330	3.75	0.000*	18.7930	5.90	0.000*	81.4773	1.79	0.077***
DER	-3.4738	-0.73	0.463	-3.3526	-0.62	0.538	18.7251	0.84	0.404
SGW	1.5642	3.14	0.007*	1.5687	3.39	0.001*	1.0152	0.40	0.690
FSZ	2.0112	0.72	0.471	2.2041	0.78	0.436	13.1450	3.93	0.000*
DI				-0.0922	-4.49	0.000*	-43.4402	-2.41	0.018**
ROA_DI							4.3195	2.40	0.037**
DER_DI							-0.1522	0.03	0.977
SGW_DI							-1.1938	0.73	0.469
FSZ_DI							1.9562	1.85	0.067***
Overall R^2		0.2103			0.2244			0.3518	
Wald Chi2/F-Sta.		1.78	0.0001		14.01	0.0000		9.42	0.0000
Hausman		1.69	0.7925		1.40	0.8447		74.36	0.3426
LM chibar2		295.79	0.0000		231.29	0.0000		0.00	1.0000
Hettest Chi2		15.07	0.0001		20.36	0.0000		22.83	0.0000

Note. Stata 14 output based on data extracted from listed oil and gas firms from 2012-2022
*and ** indicate 1%, and 5% level of significance respectively.

Furthermore, R-square value of 0.2103, 0.2244 and 0.3518 suggests a moderate level of explanatory power (Hair et al., 2018). This means that factors other than those included in the model are likely influencing the share price of listed oil and gas firms in Nigeria.

The R-Square increased from 21.03% to 22.44 and 35.18%%. This indicates that the introduction of director interlocking locking strengthens the relationship between firm attributes and firm value. This means that factors other than those included in the models are likely influencing the firm value of listed oil and gas firms in Nigeria. However, the variables included in the model collectively account for about 21.03%, 22.44% and 35.18% of the firm variable variability in model one, two and three respectively, while the remaining 78.97%, 77.56% and 64.82% variation is caused by other factors not captured in the study models.

Regarding the random effect wald chi2 test, the wald chi2 is used to test the significance of the coefficients in a random effects model. In this case, the wald chi2 test for models one, two and three have a value of 1.78, 14.01 and 9.42 respectively. The probability value associated with these tests is 0.0001, 0.0000 and 0.0000 which is less than the conventional threshold of 0.05. The study concludes that there is statistically significant evidence to suggest that at least one of the independent variables has a significant effect on the firm value of listed oil and gas firms in Nigeria.

Model One: Firm Attributes and Firm Value

Model one reveals that the positive and statistically significant coefficient (18.7330, p-value = 0.000) indicates a strong positive relationship between ROA and share price. It implies that an increase in the profitability of the sampled firms leads to an equal increase in firm value. In addition, the 18.7330 coefficient on profitability suggests that a percentage increase in profitability would increase share price by 18.7330 units which is significant at 1% level of significance as other explanatory variables remain constant. This implies that firms with higher profitability, as reflected by ROA, tend to have higher market valuations. This aligns with investor preference for companies with efficient management practices and the ability to generate consistent returns.

The findings support both agency theory and resource dependence theory. From an agency perspective, higher profitability (ROA) aligns shareholders' interests with management, leading to higher valuations. However, director interlocking raises concerns about potential conflicts of interest, where directors might prioritize other firms they serve, reducing focus on maximizing shareholder value in their focal firm. This finding agreed with the findings of Wu et al. (2021) who found that profitability has a positive and significant effect on firm value.

Table 6 further presents the result regarding the effect of debt-to-equity ratio and firm value. The empirical result shows that the debt-to-equity ratio, which was used as the measurement of financial leverage, has a negative insignificant impact on firm value at a coefficient value of -3.4738. The negative and insignificant coefficient (-3.4728, p-value = 0.463) suggests an increase in DER decreases firm value by 3.4728. While a higher debt ratio could increase financial risk, the result might not be statistically significant in this model. More so, this indicates that a percentage increase in financial leverage while other factors variables remain constant, decreases the tendency of sampled firms' improvement in firm value.

Insignificant negative effect suggests that changes in debt-to-equity ratio do not significantly impact share price. This aligns with agency theory, indicating that investors may not perceive debt levels as a significant factor affecting firm value in this context. From a resource-based perspective, it could suggest that the debt structure may not be a critical resource influencing firm value in the oil and gas sector in Nigeria.

Table 6 also reveals that sale growth measured as a year change in turnover revealed a positive but significant impact on firm value. The positive and statistically significant coefficient (1.5642, p-value = 0.007) indicates a positive relationship between sales growth and share price. Investors value firms demonstrating consistent growth in revenue, suggesting future profitability and expansion potential. This finding implies that a unit increase in sales growth would increase firm value to the tune of 1.5642. Positive and significant effect implies that higher sales growth leads to increased share prices. This is consistent with both agency theory, as higher sales growth could signify better performance and potential for future profitability, and resource-based theory, as sales growth could indicate the utilization of valuable resources effectively.

Table 6 further shows that firm size has a statistically insignificant positive impact on firm value at a coefficient value of 2.0120 and probability value of 0.471. This shows that firm size measured as the natural logarithm of total assets influenced firm value of listed oil and gas firms. The result also indicates that increase in firm size would increase firm value by 2.0120 units. The positive coefficient (2.0120) also implies that larger firms might benefit from economies of scale, brand recognition, and greater access to resources, leading to higher market valuations.

Furthermore, insignificant positive effect indicates that firm size does not significantly influence share prices. This may suggest that, in this context, firm size might not be a crucial determinant of firm value according to both agency theory and resource-based theory. The finding also supports the finding of Adamu et al. (2019), who documented that firm size has positive effect on firm value. On the other hand, the study disagreed with the findings of Mohammed and Kurawa (2021), whose study revealed that firm size has negative impact on firm value.

Models Two and Three: Firm Attributes, Director Interlocking and Firm Value

Table 6 shows that the coefficient of DI is -0.0922 in model two and probability value of 0.000. This indicates that it is significant at 1% level of significance. The negative and statistically significant coefficient (-0.0922, p-value = 0.000) suggests a direct negative effect of director interlocking on share price. This finding aligns with concerns about potential conflicts of interest and information asymmetry arising from directors serving on multiple boards.

Furthermore, the negative coefficient implies that the higher the level of DI the lower the level of value of firm. This aligns with agency theory, indicating potential conflicts of interest or reduced managerial efficiency due to interlocking directorates, leading to decreased firm value. From a resource-based perspective, it might suggest that directors interlocking divert managerial attention away from value-creating activities, negatively impacting firm value.

In addition, the moderated model (Model Three) in Table 6 shows that the moderated ROA has a t-value of 2.40 with a coefficient value of 4.3195 and p > t of 0.037 which indicates a significant impact on firm value. The moderated model shows that it is positive and lower than its corresponding value in Model One. The positive and statistically significant coefficient (4.3195, p-value = 0.000) for the interaction term indicates that director interlocking weakens the positive relationship between ROA and share price. This indicates that when directors hold positions on multiple boards, their focus on individual firms might decrease, potentially diluting the positive impact of strong profitability on market valuation. It also indicates that when directors are spread thin across multiple boards, their focus on maximizing profitability in any single firm might decrease.

The coefficients of the financial leverage in Model One and moderated model (Model Three), has insignificant influence in the both models. This shows that moderating financial leverage with director interlocking exerts an insignificant impact on firm value. On the other hand, this means that the combination of DER and DI would strengthen the relationship. Also, the insignificant coefficient (-0.1522, p-value = 0.977) suggests director interlocking does not significantly moderate the negative effect of DER on share price. The study also implies that increase in the moderated DER with DI would decrease firm value. However, lower decrease is seen compared to unmoderated DER.

Concerning firm growth which was proxied by sale growth has the coefficient, the z-stat and the p-value in Table 6 which show that the interaction of DI with sales growth does not improve the effect on the relationship between sales growth and firm value. This is because the sales growth has a positive coefficient and a significant impact on firm value in the model one, which turned out to have a negative coefficient value and insignificant effect on firm value in the moderated model. This implies that the higher the variations in sales from one accounting period to the other, the lower and insignificant effects on the firm value of the sampled oil and firms in Nigeria.

Sales Growth and Director Interlocking: The negative and insignificant coefficient (-1.1938, p-value = 0.469) indicates director interlocking has no clear moderating effect on the positive relationship between sales growth and share price as indicated in model one. Insignificant moderation effect suggests that director interlocking does not significantly alter the relationship between sales growth and share prices. This implies that director interlocking does not affect how sales growth influences firm value.

Table 6 also displayed the result on the moderated firm size which has a t-value of 1.85 and 1.9562 coefficient with a significant probability value at 0.067 which is significant at 10% level of significance. This indicates that moderated firm size influence firm value in the moderated model is different from its effect in the model one. DI decreased the coefficient value from 2.0112 to 1.9562, but from insignificant to significant level. This also indicates that DI strengthened the relationship between firm size and firm value. This implies that the benefits of large size for share price might be mitigated when directors are spread thinly across multiple boards.

The findings implications are that companies prioritize building strong financial performance and demonstrating consistent growth to attract investors. However, they are also mindful of potential conflicts arising from director interlocking and consider implementing policies that promote board independence and focus. Firms experiencing higher sales growth are likely capturing larger market shares or penetrating new markets effectively. This not only indicates better performance but also suggests that the firm possesses competitive advantages such as strong branding, product differentiation, or effective marketing strategies. Consequently, investors perceive these firms as more valuable, leading to increased share prices. While firm size has insignificant effect on share prices in this context, larger firms typically have more resources, market power, and brand recognition, which could positively impact firm value. However, the insignificant coefficient suggests that in this specific market environment, other factors may have a more significant influence on firm value than mere size.

The negative and significant effect of director interlocking on share prices indicates potential governance issues or managerial inefficiencies associated with interlocking directorates. This finding underscores the importance of transparent governance structures and the need to mitigate conflicts of interest among directors to enhance firm value. The moderation effects suggest that director interlocking could either amplify or mitigate the impact of certain firm attributes on firm value. Understanding these moderation effects is crucial for effective corporate governance and strategic decision-making. For instance, leveraging interlocking directorates to enhance the positive impact of return on assets could be a strategic advantage, while mitigating any negative effects on the relationship between firm size and firm value could help maintain investor confidence and trust. Findings also implies that regulatory bodies could encourage good corporate governance practices by promoting independent boards and setting clear guidelines on director interlocking. This could enhance transparency and accountability within listed oil and gas firms in Nigeria.

In the context of theories, resource dependence theory suggests that firms with strong financial performance (ROA) and growth potential (sales growth) attract investors due to their ability to secure resources and navigate competitive environments. However, director interlocking may hinder effective resource allocation and strategic decision-making due to divided attention among multiple boards.

In the context of agency theory, the insignificant effect of DER on share prices suggests that shareholders and managers may have different preferences regarding the capital structure. Shareholders might prefer less debt to minimize financial risk, while managers may prefer more debt to finance expansion projects. This divergence of interests could lead to agency costs, where managers prioritize their interests over shareholders' interests, potentially affecting firm value. From a resource-based perspective, the insignificant effect of DER could imply that the level of debt is not considered a critical resource for creating and sustaining competitive advantage in the Nigerian oil and gas sector. Instead, other resources such as brand reputation, distribution networks, or product innovation might play a more significant role in determining firm value.

The positive and significant effect of sales growth on share prices aligns with agency theory, as it suggests that firms with higher sales growth are more likely to align with shareholder interests by maximizing revenue and profitability. Managers are incentivized to pursue strategies that enhance sales growth to maximize firm value, thereby reducing agency costs. From a resource-based perspective, sales growth reflects the effective utilization of resources such as marketing capabilities, product quality, and customer relationships. Firms that excel in these areas are able to sustain competitive advantages, leading to increased market share and firm value over time.

The insignificant positive effect of firm size on share prices may relate to agency theory in that larger firms may face challenges in aligning managerial interests with shareholder interests due to increased organizational complexity. This could result in agency costs associated with monitoring and controlling managerial behaviour, potentially offsetting the positive effects of firm size on firm value. From a resource-based view, the insignificant effect of firm size suggests that size alone may not confer a sustainable competitive advantage in the oil and gas sector in Nigeria. Instead, it is the strategic utilization of resources, regardless of firm size, that drives firm value. Factors like brand reputation, distribution efficiency, and innovation capability may be more critical determinants of firm value.

The negative but significant effect of director interlocking on share prices implies potential agency costs associated with conflicts of interest and managerial entrenchment. Interlocking directorates may lead to managerial collusion or reduced managerial accountability, ultimately eroding firm value as managers prioritize their own interests over shareholder interests. From a resource-based view, director interlocking may divert managerial attention away from value-creating activities such as strategic planning, innovation, and operational efficiency. This diversion of managerial resources could diminish the firm's ability to leverage its core competencies and unique resources, thereby reducing firm value over time.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study investigated the relationship between firm attributes and firm value of listed oil and gas firms in Nigeria, considering the moderating role of director interlocking. It concluded that Profitability (ROA), Firm growth and Director interlocking are the major determinants of firm value. while leverage and firm size exhibited an insignificant effect on effect on firm value. The study also concluded that director interlocking significantly moderated the effect of firm attributes on firm value.

Recommendations

Based on the findings and conclusion of the study, the study recommended that the Chief Financial Officer (CFO), Operations teams and company departments should implement cost-saving measures, improve operational efficiency, invest in R&D for product innovation, optimize pricing strategies and continuously monitor and improve profitability throughout the year. CFO, Board of Directors and financial department should maintain a balanced capital structure with a healthy mix of debt and equity. Explore alternative financing options like green bonds or project financing to reduce reliance on traditional debt. The companies should view and adjust capital structure as needed, considering factors like interest rates, project needs, and overall financial health.

Sales and marketing teams, and product development teams should develop effective marketing campaigns, expand into new markets, introduce new product lines, improve customer service to drive repeat business. Management should continuously analyse market trends and customer needs to identify opportunities for sales growth. CEO, Board of Directors should carry out strategic planning sessions. Oil and gas firms should consider organic growth strategies like product diversification or market expansion, evaluate inorganic growth opportunities through mergers and acquisitions, but ensure strategic fit and value creation and regularly assess the optimal size for the company's goals and resources.

Regulatory bodies such as the Financial Reporting Council of Nigeria (FRCN), Securities and Exchange Commission (SEC), Nigerian Exchange Group (NGX) among others should introduce regulations that establish clear guidelines for the number of boards positions a director could hold concurrently which should not be more than two. This could be achieved through legislative amendments to the Companies and Allied Matters Act (CAMA) 2020 and FRCN code of corporate governance 2018.

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AUDIT QUALITY AND INVESTORS CONFIDENCE IN FINANCIAL REPORTS OF LISTED SERVICES COMPANIES IN NIGERIA

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Abstract

This study evaluated the effect of audit quality attributes on investors' confidence in the financial reports of listed services companies in Nigeria from 2013-2022. The study adopted longitudinal research design while panel multiple regression was used to estimate the effect of audit quality on investors' confidence. Audit quality was measured by audit size, audit independence and audit tenure, while investors' confidence was measured by market price. It was found that audit size and audit independence have positive significant effect on market price, while audit tenure has a negative significant effect on market price of listed services companies in Nigeria. Therefore, the study recommended that services companies should encourage reasonable audit size and audit independence to improve financial reporting quality.

Key words: Audit Quality, Investors' Confidence, Financial Reports, Market Price

INTRODUCTION

Investors are responsible for providing needed capital to facilitate the effective operation of the company and have a right to elect their representatives, the company's board of directors. The board of directors is authorized to make decisions on behalf of its constituents (investors) and is directly responsible for selecting and continuously monitoring management's decisions and actions without micromanaging. Management is authorized to run the company and is responsible and accountable for decisions made and actions taken with the primary purpose of creating and enhancing sustainable shareholder value. Auditors provide the opportunity for investors to monitor the company's management and enable the board to oversee management and facilitate management's decision-making process, which creates investors' confidence (Oladejo et al., 2020).

At the beginning of 2007, the global financial crisis triggered by American subprime mortgage crisis produced huge impact on stock market around the globe and in Nigeria practically. During this period, dramatic change of stock market was influenced by the variation of investor confidence to some extent. With supervision and management of listed companies strengthened by government, issuance of a series of favorable policies and new opportunities in the economic growth of the country, business operation was improved and performance of listed companies increased.

A system of efficient audit quality raises investor confidence in the market, and furthers the establishment of more stable investment flows in the long run. This is a lever for establishing a relationship of trust between the company and investors, thereby attracting new investors (Chen & Al., 2003). Moreover, the recent turbulence in financial markets has underlined how important it is to adopt good forms of audit quality that will give investors' confidence.

Basel Committee (BCBS, 2008) opines that the complexity of the financial market and demand for an increase in transparency suggest that clear and reliable accounting information, supported by quality audits, is essential to increase of market confidence. Scholars have traced the demand for external audit services to have originated from the agency issues which arose out of the separation of ownership and control of firms. Therefore, as put by Arebu (2016), external auditors play a crucial role in providing reasonable assurance to the quality of financial information presented to shareholders and other users of financial statements.

Studies further show that ensuring the reliability of financial information published by firms requires that the statements are certified by an auditor, thus, lending credence to financial statements and instilling users' confidence. Sulaiman (2011) identifies various constructs that give meaning to audit quality in practice. These include auditors' characteristics, firm's characteristics, compliance obligations, the content and control of audit procedures, financial statement quality, and client service orientation, asking challenging questions, professional appearance, the quality of interaction between auditor and audit client, consultation and training, and objects such as documents and records, as fundamental in symbolizing audit quality in practice.

Audit quality is fundamental to a firm's performance as an objective audit based on stakeholders' confidence in the integrity and credibility of financial reports (Ado et al., 2020). Financial reports become relevant, transparent and dependable when prepared in compliance with accounting standards and the opinions are formed on them in compliance with audit principles. Companies' annual reports are not expected to mislead stakeholders but rather provide information that is recent and supported by footnotes to assist its clarifications (Hasan et al., 2020). Audit quality reduces earnings management and significantly moderates the relationship between the audit committee and financial reporting (Hasan et al., 2020).

The sudden collapse of firms shortly after the publication of juicy profits has generated a series of questions from the stakeholders. The most worrisome part of the narrative is that many collapsed companies were audited by external auditors and were given a clean report. This anomaly has necessitated tightening regulations, standards, and modification of corporate governance mechanisms (Umobong & Ibanichuka, 2017). Therefore, existing studies have argued that investors ascribe more values to higher financial reporting quality than firms with lower financial reporting qualities. Thus, they are willing to pay more for shares of firms with higher financial reporting quality (Elliott et al., 2020).

Despite this significance, most of the existing studies on investors' confidence, such as Langit and Fuad (2017), Chaohui and Jian (2014), Wahyudi and Chairunesia (2019), Xiaolu, et al. (2016) concentrate on other corporate governance structures without evaluating the effect of audit quality variables on investors' confidence. This has created gap in literature due to the significance of audit quality in monitoring management activities.

Furthermore, the studies on audit quality and investors such as Oladejo et al., (2020), Oluyinka, et al. (2020), Imegi and Oladutire (2018) concentrate on the banking sector. This means that the studies are more relevant to only investors in the banking sector. Other stakeholders from different sectors would not find it relevant for decision making. It is paramount to provide such argument in services sector in order to provide basis for decision making for investors. It is based on the above motivation that this study assessed the effect of audit quality attributes on investors' confidence of listed services companies in Nigeria with the following specific objectives:

i. Ascertain the effect of audit size on investors' confidence of listed services companies in Nigeria.
ii. Evaluate the effect of audit independence on investors' confidence of listed services companies in Nigeria.
iii. Determine the effect of audit tenure on investors' confidence of listed services companies in Nigeria.

LITERATURE REVIEW

Audit Quality

Audit quality refers to the extent to which an auditor's independence, integrity, and objectivity impact auditors' opinion on the quality of financial statements (Baah & Fogarty, 2018). From firms' perspective, the audit firm is a continuous process that recognises crucial matters that affect audit performance, analyses conditions, formulate responses, and monitors and strengthen performance (Martin, 2013). Auditors and investors agree that the most critical audit quality determinants are the auditor's characteristics (Christensen et al., 2016).

Audit Size

Audit committee size refers to the total number of audit committee members. The quality of directors in a firm determines and influences the board functioning and hence corporate performance. Proponents of large audit size believe it provides an increased pool of expertise because larger boards are likely to have more knowledge and skills at their disposal. They are also capable of reducing the dominance of an overbearing CEO (Forbes & Milliken, 1999), and hence put the necessary checks and balances. Board's monitoring and supervising capacity is increased as more and more directors join the board (Jensen, 1993). Besides, there are authors who believe that large board size adversely affects the performance and well-being of any firm. Larger boards are difficult to coordinate, and are very prone to fictionalizations and coalitions that will delay strategic decision-making processes (Forbes & Milliken, 1999).

According to the United Kingdom (UK) Corporate Governance Code (2016), the Board should establish an audit committee of at least three, or in the case of smaller companies, two, independent or non-executive directors. In smaller companies the company Chairman may be a member of, but not chair, the committee in addition to the independent or non-executive directors, provided he or she was considered independent on appointment as Chairman. The board should satisfy itself that at least one member of the audit committee has recent and relevant financial experience. The audit committee as a whole shall have competence relevant to the sector in which the company operates.

To achieve its efficiency, an audit committee requires sufficient number of members that would enable it to generate substantive discussion and to consider emerging issues, as well as access to management, external auditors, internal auditors, the full board, and legal counsel (DeZoort et al., 2002).

Audit Independence

Audit independence has been described as the ability to "stand apart" from inappropriate influence and to be free of managerial capture. This enables the individual to make the correct and uncontaminated decision on a given issue (Campbell, 2011). Independent audit committees are an important part of an organization's governance structure. In organizations where the majority of members in the audit committee are independent, such members support the board in fulfilling its oversight responsibilities. These audit committees provide oversight by offering objective advice and recommendations to the board on whether the organization's governance, risk management, and internal control processes are suitably designed and working as intended to achieve the objectives.

Audit committees help build trust and confidence in how the organization is managed. The audit committee should exercise due care in fulfilling its oversight responsibilities. The importance of audit committee independence is rooted in regulatory codes requiring an audit committee to be composed of non-executive directors, because independence of audit committee member increases the effectiveness of audit committee. The presence of an autonomous audit committee may reduce managers' opportunistic behaviour in their financial accounting choices (Cotter & Silvester, 2003).

Abbott et al. (2004) argue that audit independence facilitates a stronger monitoring role since the absence of a current or former member of management would strengthen the effectiveness of the internal audit function. Moreover, unlike non-independent members of an audit committee, the independent members are more likely to be penalised in the external market for outside directors, hence are likely to be more diligent and objective in monitoring management performance (Dhaliwal et al., 2010). Furthermore, independent audit committee members are likely to enhance firms' financial report accountability and audit relationships with internal and external auditors, and thus improve the monitoring efficiency of the financial reporting processes and internal control systems (Dhaliwal et al., 2010).

Investors' Confidence

According to Jogiyanto (2003), investment is a delay in current consumption for use in efficient production for a certain period of time, while Tandelilin (2001) suggests that investment is a commitment to a number of funds or other resources currently carried out, with the aim of gaining profits in the future. Investor confidence has been a long-standing subject of interest among financial market observers, participants, researchers, and regulators. Therefore, investor confidence is the investors' willingness to engage in the investment opportunities and associated intermediation channels available to them based on their perception of risk and return (James, 1979).

Investor confidence is grouped into two components. The first component is called 'investor optimism', meaning investors' perception of "fundamental" risk and expected return, i.e., the risk and return inherent to securities issued by corporations and other entities. This could include repayment risks associated with intermediaries and the issuing entities. This definition of investor optimism also includes the ability of investors and their advisors to make rational investment decisions, i.e., those that result in optimal benefit to investors (Georgarakos & Giacomo, 2011).

The second component of investor confidence is ‘investor trust,’ meaning investors’ perception of the risk and potential losses from possible expropriations by other market participants. Specifically, investor trust reflects perception of exposure to harm from theft, fraud, and other violations of legal protections by issuers and intermediaries (e.g., accounting manipulations, insider trading, security price manipulations) (Georgarakos & Giacomo, 2011). Trust is shaped by an individual’s experiences and is a factor that affects consumer decisions in relationships with different types of service providers. Giannetti and Wang (2016) find that revelation of corporate fraud in a state in the United States (US) decreases investment in the stock market by residents of that state. Their findings indicate that publicizing fraud could diminish investor trust.

Therefore, investor confidence is based on investors’ perception of the attractiveness of their investment opportunities in terms of perceived risks and expected returns pertaining both to the prospects of issuers and the prospect of expropriation by other market participants. This perception may or may not reflect the true risk and return of their selected investment or of the financial market as a whole. This study refers to any deviation between the perceived and actual return/risk of investments as a ‘distortion’ in investor confidence, which may stem from distortions in investor optimism, trust, or both. Any distortion in confidence results in a loss of investor welfare as it causes investors to deviate from their optimal investment allocation given the true level of risk and return. Investors who overestimate expected returns would receive an insufficient return to compensate for their assumed risk. Alternatively, if they overestimate their investment risk or uncertainty, investors may forego valuable investment opportunities (e.g., abstaining from the stock market). These potential distortions could also impact issuers’ access to capital, and result in the lack of funding to viable investment projects in the economy, or subsidize projects that would not otherwise receive funding if their true prospects were appropriately disclosed (Georgarakos & Giacomo, 2011).

Audit Quality and Investors’ Confidence

Oladejo et al. (2020) appraised the determinants of external audit quality and the relationship with the users’ confidence in the financial report of listed Deposit Money Banks (DMBs) in Nigeria. Secondary data was used as obtained from the financial statements of seven banks purposively selected out the 15 quoted DMBs in Nigeria as at 31st of December, 2017. Data collected was analyzed using descriptive statistics and Pearson Product Moment Correlation Coefficient (PPMCC). The results showed that technical training and proficiency (TTP), auditor size (AUDS), engagement performance (EP), and auditor independence (AUDIN) were significant determinants of external audit quality. It was further revealed that there is a significant relationship between Audit Quality Attributes and users' confidence in the financial report of the selected DMBs in Nigeria.

Imegi and Oladutire (2018) investigated the existence of a relationship between mandatory auditor rotation and audit quality of Nigerian listed banks as of 31st December, 2016. They relied on secondary data obtained from annual reports and statements of accounts from the NGX. Using Ordinary least square (OLS) econometric, they found that there existed a significant relationship between mandatory auditor rotation and audit quality. The current study evaluated various audit quality variables and their relationship with users’ confidence in financial statements for investment decision.

Oluyinka et al. (2020) examined the effect of audit quality on financial reporting quality of listed DMBs in Nigeria. Data was extracted from audited annual reports of all the 11 listed DMBs for ten years from 2009-2018. The study used panel multiple regression and employed random effect model to analyse data. It was found out that audit firm size, audit tenure, and audit fees affect financial reporting quality (FRQ), but only the effect of audit fees was statistically significant.

Langit and Fuad (2017) assessed how Corporate Governance affects investors’ reaction in the capital market in Indonesia using profitability (measured by return on assets) as a moderating variable. Investors’ reaction was measured by Cumulative Abnormal Return (CAR), which happened around the time of annual report publication. Corporate Governance was measured by institutional ownership, ownership by board of commissioners, audit committee, and independent commissioner. The research was done on 25 companies which were listed in Indeks LQ 45 on the Indonesian Stock Exchange from 2015-2016. Data analysis techniques used were regression analysis and moderated regression analysis (MRA). The result showed that institutional ownership, ownership by board of commissioners, audit committee, and independent commissioner negatively affected CAR. Profitability was able to explain the relationship of ownership by board of commissioners and audit committee with CAR partially. Corporate governance did not have any impact on CAR value because of the implementation of corporate governance in Indonesia did not provide optimum results because the process of considering corporate governance practices takes time to know the benefits. The study contributed to the literature on the relationship between institutional ownership and investors’ confidence at that time. Thus, there is a need to conduct recent study.

Wahyudi and Chairunesia (2019) analyzed the effect of good corporate governance on investment decisions and profitability and its impact on corporate value. The study was conducted on companies that were included in the LQ45 Index in Indonesian Stock Exchange for the 2015-2017 study period. The estimation of the research model was done using multiple regression analysis. The study results indicated that managerial ownership has no effect on investment decisions, institutional ownership has a negative effect on investment decisions, managerial ownership does not affect profitability, institutional ownership does not affect profitability, managerial ownership has positive effect on firm value, institutional ownership does not influence firm value, Investment Decision has insignificant effect on firm value, Profitability has an influence on corporate value, managerial ownership has a positive effect on corporate value through intervening variable investment decisions, institutional ownership has a negative influence on value company through intervening variable investment decisions, managerial ownership has insignificant effect on firm value through variable intervening profitability, institutional ownership has a positive effect on firm value through intervening profitability. The objective of the study was achieved but the findings could not be generalized to Nigeria because of the difference in the scope of the study.

Lending Credibility Theory: The lending credibility theory argues that the audit's primary function is to increase the trustworthiness of the financial statements (Okpala, 2015). The theory states that the selling point of an auditor's service that attracts clients and increases the confidence of financial statements' users is the added credibility expressed by the auditor. The theory suggests that audited financial statements couls increase stakeholders’ faith in management’s stewardship (Ecaterina, 2007).

Reputation Rationale Theory: This theory asserts that the big audit firms have more to lose if they should provide low-quality audit. The theory argues that the big audit firms would provide high quality audits because of their reputation and the fear of losing clients if they provide low-quality audits. In other words, reputable audit firms have a relationship with high-quality audit because of the streams of income connected with the audit, and so they would do everything possible to maintain it (DeAngelo, 1981).

METHODOLOGY

The study adopts longitudinal research design. Longitudinal research designs describe patterns of change and help establish the direction and magnitude of causal relationships between audit quality and investors' confidence from 2013-2022. The population of the study covers the services companies listed on the NGX. The study used panel multiple regressions to estimate the effect of audit quality on investors' confidence.

$$\boldsymbol{MP_{it} = \beta_0 + \beta_1 AS_{it} + \beta_2 AI_{it} + \beta_3 AT_{it} + \varepsilon_{it}}$$

Where: MP_{it}= *Market price, AS= Audit Size, AI= Audit Independence, AT = Audit Tenure, i= firm, t= time,* $\mathcal{E}$ *= Error term,* $\beta 0$ *= Constant,* β_1*-* β_3 *= Coefficient of the parameters.*

Table 3.1: Measurement of Variables

Symbols	Variables	Measurement
MP	Market price	Year-end share prices (Imegi & Oladutire, 2018)
Audit Quality		
AS	Audit Size	Total audit committee size (Oladejo et al., 2020)
AI	Audit Independence	Proportion of non-executive directors on the audit committee (Oladejo et al., 2020)
AT	Audit Tenure	Number of years spent as audit firm before replacement with another firm.1 if audit firm was replaced after three years, 0 if otherwise (Oluyinka et al., 2020)

RESULT AND DISCUSSION

In this section of the study the data collected are analysed. The analysis of the data is done using descriptive statistics for the characteristics of the variable, regression and variance inflation factor for multicollinearity test and regression analysis for the test of the hypotheses.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
MP	160	19.9346	35.3553	0.2900	224
AS	160	3.5588	.5880	2	4
AI	160	.3726	.1983	.0833	.8571
AT	160	.9306	.2543	0	1

Source: Generated from E-Views, 2023

The descriptive statistics indicates that the market price, which is used to measure investors' confidence of the sampled services companies, has a maximum of ₦224 while the lowest market price is ₦0.29. It therefore means that the companies had a varied demand for their shares as a result of investors investment decision. In the same way, the maximum number of audit size is 4 which shows the total number of people on the audit committee. The minimum is 2 while the average people on the committee is 3 (3.5588).

Furthermore, the result indicates that the company has high audit independence with maximum percentage of 0.8571 (85.7%) with minimum of 0.0833 (8%). On the average, it shows that audit independence has a mean of 0.3726 (37%) while the maximum audit tenure is 1 and minimum of 0. The maximum audit tenure indicates that some of the companies engaged the services of a particular audit firm more than 3 years while some had lower audit engagement of less than 3 years.

Table 2: Correlation Matrix

	MP	AS	AI	AT
MP	1.000000			
AS	0.368657	1.000000		
AI	0.060090	0.279158	1.000000	
AT	0.368657	1.000000	0.279158	1.000000

Source: Generated from EViews (2024)

The relationship as depicted above shows that there is no high correlation between the variables. According to Gujarati (2009), high correlation exists between variables when they have percentage of 0.8 (80%) or above that threshold.

Table 3: Variance Inflation Factor

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
AS	134.6390	1.219551	1.069644
AI	99.56253	2.260867	1.112872
AT	39.58466	2.532247	1.149830

Source: Generated from EViews (2024)

Variance inflation factor shows the multicollinearity between the variables. With centered VIF equal or above 10, it indicates multicollinearity but with less than 10 VIF, it shows that there is no multicollinearity problem. From Table 4.3, the study concludes that there is no multicollinearity between the variables because all the VIF are below 10.

Table 4: Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	1.414525	3	0.7021

Hausman result indicates the model to used. With Prob. above 5%, it shows that Random model is more preferable. Table 4.4 below shows the regression output based on random effect model.

The model of the study explained 17.6% variation in market price while other factors outside the model explained the remaining 82.4% variation. Despite this, the model is fit with f-statistics less than 5% significance level. The individual variables shows that audit size has a positive significant effect on market price with prob. less than 5% level of significance. This is an indication that audit size had significant effect on investors' confidence of listed services companies. Also, audit independence has a positive significant effect on market price with p-value less than 5% level of confidence.

Table 5: Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AS	1.130010	0.366329	3.084688	0.0022
AI	40.94158	5.325937	7.687207	0.0000
AT	-21.27412	8.416462	-2.527680	0.0119
C	6.069388	3.039664	1.996730	0.0466

R-squared	0.176454	Mean dependent var	15.45719
Adjusted R-squared	0.164822	S.D. dependent var	31.37744
S.E. of regression	28.67523	Sum squared resid	291083.2
F-statistic	15.16974	Durbin-Watson stat	0.173425
Prob(F-statistic)	0.000000		

Source: Generated from EViews (2024)

This means that increase in audit independence would increase the company's investors' confidence. However, audit tenure has a negative significant effect on market price of listed services companies with p-value less than 5% significant level. This indicates the longer the audit tenure in auditing a company, the lower the investors' confidence because of their familiarity with the management of the company.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study evaluated the effect of audit quality on investors' confidence of listed services companies in Nigeria. From the findings, the study concludes that increase in audit size would increase investors' confidence of listed service companies. Also, increase in audit independence would increase the company's investors' confidence. However, the longer the audit tenure in auditing a company, the lower the investors' confidence because of their familiarity with the management of the company. This is shown in the result as audit tenure has a negative significant effect on market price. The results of the hypotheses tested show that audit quality attributes are significant in improving the investors' confidence of listed services companies in Nigeria.

Recommendations
Given the aforementioned findings and conclusion, it is recommended that:

i. In order to improve investors' confidence, services companies should encourage reasonable audit size and audit independence to improve financial reporting quality.

ii. Auditors should be adequately remunerated as this could give them sufficient resources to conduct a thorough audit capable of uncovering material misstatements and errors in the financial statements, and hence achieve higher-quality reports

iii. Financial policymakers should strengthen regulatory watch on external audits for effective audit functions and policy that would lend reliability to auditors' reports on financial statements of the companies.

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SELECTED BOARD ATTRIBUTES AND RISK DISCLOSURE OF QUOTED INDUSTRIAL GOODS COMPANIES IN NIGERIA

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Abstract

Past accounting scandals, the 2007/2008 global financial crisis and the recent collapse of giant companies across the globe have triggered the need for vibrant risk management and high quality of risk reporting through sound corporate governance. Corporate governance codes have recognized the need to improve corporate risk disclosure and provide guidance for such disclosures. Understanding the drivers for firms to disclose risk-related information may assist regulators and standards setters in promoting both the spread and the improvement of such disclosures through the issuance of corporate governance codes and reporting. This study responds to recent calls for more research on this subject by empirically examining the effect of board attributes on risk disclosure of quoted industrial goods firms listed on the Nigerian Exchange Group. The study adopts ex-post facto research design. The population of the study comprised all the 13 listed industrial goods firms. Data was extracted from the published financial statements of the industrial goods companies, covering a period of 10 years from 2013 to 2022. Risk disclosure was measured using Dichotomous "1" if a company discloses risk in the financial statement or "0" if otherwise. The study employs logistics regression as the technique for analysis of data. The results indicate that board independence, board size and board gender diversity all have significant effect on the extent of risk disclosure in the industrial goods companies in Nigeria. The study concludes that board composition is a viable corporate mechanism for improved voluntary disclosure such as risk disclosure in industrial goods companies. The study, therefore, recommends that the Nigerian industrial goods sector should compose boards with diversities such gender, expertise, and nationality, especially the independent directors who could bring their experiences to bear in making decisions in respect to risk information disclosures.

Keywords: Board Independence, Board Size, Board Gender Diversity, Risk Disclosure, Industrial Goods Firms, Nigeria.

INTRODUCTION

Transparency in financial reporting has attracted increased attention following the major scandals and corporate collapses of the early 2000s, the global financial crisis and the most recent collapses of giant companies in both developed and developing economies. These collapses emphasized the need for information and good corporate governance. Besides, there is an increasing demand for high quality information for investors' decision-making process. Nigeria was not immune from these events and gives more importance to transparency and good corporate governance practices. Accounting literature emphasized the importance of the risk disclosure to fulfil the demand of their stakeholders to assess the company's risk profile and the firm market value (Abraham et al., 2012; Miihkinen, 2013).

Disclosure of corporate risk information is important since it increases transparency, thus giving shareholders' more confidence and lowering their uncertainty about future cash flow as well as making it more viable for corporations to obtain external funding at a cost of capital, hence increasing capital market activities in general (Deumes, 1999; Easley & O'Hara, 2004; Kothari et al., 2009). Institutions are encouraged not only to report their activities but also the risks associated with them as well as their strategy for and capacity to manage these risks (ICAEW, 1999).

Risk disclosure (RD) is the dissemination of any quantitative or qualitative information about uncertainties or risks facing the firm (Elbannan & Elbannan, 2015; Linsley & Shrives, 2006). Risk disclosure quality is the quality of risk information that are disclosed by firms in term of relative quantity (adjusted by type of sub-industry and firm size), depthness (the potential impact of risk disclosed on firm's future performance), the coverage within every type of risk, and the outlook profile of firm's risk management. Examples of these risks include financial risks (such as interest rates, exchange rates and liquidity risks); regulatory risk (such as tariff and trade policies, tax policy reforms, minimum wage laws and financial regulations); operational risks (such as customer dissatisfaction or product or service failure); integrity risks (such as illegal acts and earnings management); and strategic risks such as competitors and industry-related risks) (ICAEW, 1997; Linsley & Shrives, 2006). More specifically, Hassan (2009) avers that risk disclosure quality is the extent and value of information communicated in financial statements dealing with managers' estimates, judgments, reliance on market-based accounting policies such as impairment, derivative hedging, financial instruments, and fair value as well as the disclosure of concentrated operations, non-financial information about a firm's plan, recruiting strategy, and other operational, economic, political and financial risks.

Ostensibly, several factors within the corporate governance (CG) literature influence the ability of companies to report on non-financial information such as risk in their financial statements. This is because sound CG could protect stakeholders' interest by introducing and strengthening business regulations which enhance accountability, integrity and transparency. Ultimately, this could rationalize the decision-making process as well as mitigate the agency problem between the management and the shareholders. One of the tools used in achieving corporate governance objective is the board of directors. The Board of directors is one of the most powerful CG mechanisms to oversee a firm's progress, enhance the quality of disclosure by monitoring and controlling the management's activities and increasing a company's alignment with its stakeholders (Ira, 2017). This implies the importance of directors in encouraging rather than mandating risk disclosure.

Consistently, research works have found that the effectiveness of CG within RD depends on the composition of the board of directors. In particular, there is a need for diversity within the board to mitigate the complexity of interests involved in the company's CG; as the board of directors is responsible for safeguarding the public interest in order to guarantee protection to stakeholders and to ensure transparency and compliance with existing laws. Some other studies have argued that greater disclosure by the board of directors signals a greater ability to manage risk. Thus, the board of directors may use RD to signal their company's good performance and to increase their legitimacy.

One of the attributes of the board that is associated with improved risk disclosure is independence which is a fundamental quality of outside directors. Literature showed that independent directors may promote the corporate disclosure and may, in turn, gain a good reputation as expert monitors (Samaha et al., 2015). Indeed, independent directors could reduce the information asymmetry between managers and shareholders by providing more voluntary disclosure (Beasley, 1996). Thus, the appointment of independent directors provides better monitoring of management's behaviour, and so is considered as a way to control agency problems (Allini et al., 2016). Besides, from a resource dependence theory, the non-executive directors are considered as a link between the company and the external environs due to their expertise, prestige and different contacts.

Furthermore, literatures have demonstrated that large board size increases the efficiency of the board and promotes the disclosure of information (Cormier et al., 2010). According to the agency theory, the larger boards incorporate a variety of expertise and available resources, which results in more effectiveness in boards' monitoring role (Hidalgo et al., 2011; Singh et al., 2004). In fact, these boards are less likely to be dominated by management, thanks to the diverse members' opinions and the power that may exert to supervise managers, which may in turn promote the corporate disclosure (Samaha et al., 2015). In addition, John and Senbet (1998) argued that a large board size may improve the monitoring role due to greater availability and combined effort. Indeed, a large size of the board would allow a high number of members who have financial and accounting background, which could affect managers' voluntary disclosure decisions and extend corporate risk disclosure level (Elzahar & Hussainey, 2012).

Female directors could improve decision making by providing different perspectives and opinions in the decision-making process. Indeed, gender diversity in the board is an effective driver of business performance and could lead to an enrichment of knowledge (Erhardt et al., 2003). Compared to male directors, female directors seem to be more active and they are more likely to attend board meetings and to sit on monitoring committees (Adams & Ferreira, 2009). Women are generally more responsive to crises and more likely to engage in giving than men (Williams, 2003). Literature showed that women provide a more collaborative approach to leadership, which contributes to greater communication between managers and the board, as well as stakeholders (Eagly et al., 2003).

Although extensive literature has examined the impact of board on disclosure, little has examined the effect of board on risk disclosure in general and in developing countries in particular. In addition, there is a need for more risk disclosure given the challenges that a company may undergo in order to assess its future performance and to ensure the protection of their wealth. Therefore, understanding the determinants of risk disclosure represents relevant information for standard-setters. Besides, there were calls for further research on the effect of board of directors on risk disclosure (Khlif & Hussainey, 2016). This study replied to this call for research. It is worth noting that prior research used the quantity of disclosure as a proxy for disclosure quality. However, literature shows that disclosure quality is more important than disclosure quantity (Beretta & Bozzolan, 2004; Marston & Shrives, 1991.). This motivated this current study to measure risk disclosure quality and then to examine the effect of board attributes on risk disclosure of quoted industrial goods companies in Nigeria.

H_{01}: Board independence has no significant effect on risk disclosure quality of quoted industrial goods companies in Nigeria.

H_{02}: Board expertise diversity has no significant effect on risk disclosure quality among quoted manufacturing companies in Nigeria.

H_{03}: Board gender diversity has no significant effect on risk disclosure among manufacturing companies in Nigeria.

LITERATURE REVIEW

Concept of Board Attributes

The phrase "board attributes" is a blend of two concepts: board and characteristics. While the former as stated in Section 334 (1) of the Companies and Allied Matters Act 2020 (as amended), the board of directors (usually referred to as the board) is vested with the duty of hiring managers and administering the activities of the organization. The latter means a typical or noticeable quality of someone or something. Therefore, board attributes could be defined as one internal corporate governance mechanism, which expatiates on the features of the board. The characteristics of the board include size, independence, diligence, diversity (age, gender, nationality, expertise, educational and functional background), and committee structure (Anderson et al., 2004).

Fundamentally, the administrative activities of the board involve the duty of overseeing and monitoring the organizations financial reporting process (Anderson et al., 2004). They meet at a scheduled time with the organizations' accountant and external auditors to review financial statements, audit procedures and the internal control system (Klein, 2002) targeted at improving the organisation’s performance. Hermalin and Weisbach (2003) see the board as a market solution that helps mitigate the agency problems that befalls most organizations. According to Jenfa (2000), the board is responsible for a company’s internal control systems and has the ultimate responsibility for the operation of the company. Boards define the rules for the chief executive officer regarding hiring and firing, compensation plan and provide high-level advice. Vafeas (2000) see boards duty as mainly responsible for monitoring the quality of information contained in financial reports because managers often have their own interest and incentives with regard to managing earnings and potentially misleading stockholders.

Board Independence

According to the code of corporate governance for public companies issued by the Nigerian Securities and Exchange Commission (SEC, 2011), an independent director is a non-executive, non-substantial shareholder of the company whose shareholdings directly or indirectly does not exceed 0.1% of the company's paid-up capital. In addition, the director must have not been previously employed or has no business or professional relationship with the company. Several authors such as Higgs (2003) and Beekes and Brown (2006) defined the independent nonexecutive directors as the administrators who should not find themselves in a situation that may affect their independence of judgment or place them in a situation of actual or potential conflict of interest, so they should be independent of management. In addition, others have defined external administrators by excluding the internal ones.

Thus, given that inside directors are those who hold a management position in the firm and which could then be of company executives or employees (Sridharan, 1996), so the outside directors are the other directors. Literature showed that independent directors may promote the corporate disclosure and may, in turn, gain a good reputation as expert monitors (Samaha et al., 2015). Moreover, their presence reduces the likelihood of financial statement fraud (Beasley, 1996). In addition, inside directors are less effective than outside directors and are unable to punish leaders for fear of losing the personal benefits that they could profit (Jensen, 1993). Indeed, independent directors could reduce the information asymmetry between managers and shareholders by providing more voluntary disclosure (Beasley, 1996). Thus, the appointment of independent directors provides better monitoring of management's behaviour, and so is considered as a way to control agency problems (Allini et al., 2016). Besides, from a resource dependence theory, the non-executive directors are considered as a link between the company and the external environs due to their expertise, prestige and different contacts (Haniffa & Cooke, 2002).

Board Size

Dozie (2003) defined board size as the number of members that form the board. There is no agreed number of members that make up an ideal board size. There have been diverging opinions by various researchers on the number of persons that should make up an ideal board. Some schools of thought are of the opinion that a small board is more effective because it enhances fast decision making and could not be manipulated by management. Dozie (2003) also argued that a smaller board may be less encumbered with bureaucratic problems, more functional and is able to provide better financial reporting oversight.

It is advocated a relatively small board to take advantage of different existing expertise and to avoid sinking in endless discussions and approaches, and to be more effective and more responsive in decision making. Literature showed that large board size increases the efficiency of the board and promotes the disclosure of information (Cormier et al., 2010). According to the agency theory, the larger boards incorporate a variety of expertise and available resources, which results in more effectiveness in boards' monitoring role (Hidalgo et al., 2011; Singh et al., 2004). In fact, these boards are less likely to be dominated by management, thanks to the diverse members' opinions and the power that may exert to supervise managers, which may in turn promote corporate disclosure (Samaha et al., 2015). In addition, John and Senbet (1998) argued that a large board size may improve the monitoring role due to greater availability and combined effort.

Indeed, a large size of the board would allow a high number of members who have financial and accounting background, which could affect managers' voluntary disclosure decisions and extend corporate risk disclosure level (Elzahar & Hussainey, 2012). This is in line with the resource dependency theory, which presumes that large board has a better knowledge and ability to ensure the management of corporate resources (Pfeffer, 1972). However, Elzahar and Hussainey (2012) and Allini et al. (2016) found no impact of board size on risk disclosure. Other risk disclosure studies found a positive impact (Allegrini & Greco, 2013; Elshandidy & Neri, 2015), while Al-Maghzom et al. (2016) found a negative impact.

Board Gender Diversity

Board gender diversity is the proportion of women to men on the board. Evolutionary biology literature indicates that women are specialized in different tasks as a result of the requirements of nature. As a result, there have been arguments and counter arguments about women exhibiting important characteristics necessary for good governance. Specifically, it has been argued that women are meticulous, risk averse, skilled in accounting and finance, and good decision-makers (Azmi & Barrett, 2013). Literature showed that the diversity of experience, background, and attitude allow providing benefits, particularly in corporate governance (Hillman et al., 2007; Srinidhi et al., 2011). Female directors could improve decision-making by providing different perspectives and opinions in the decision-making process.

Indeed, gender diversity in the board is an effective driver of business performance and could lead to an enrichment of knowledge (Erhardt et al., 2003). Compared to male directors, female directors seem to be more active and they are more likely to attend board meetings and to sit on monitoring committees (Adams & Ferreira, 2009). Women are generally more responsive to crises and more likely to engage in giving than men (Williams, 2003). Literature showed that women provide a more collaborative approach to leadership, which contributes to greater communication between managers and the board, as well as stakeholders (Eagly et al., 2003). Ntim et al. (2013) and Allini et al. (2016) found that the presence of women on the board positively affects risk disclosure. Their results were consistent with the research of Ntim et al. (2013).

Concept of Risk Disclosure

Risk disclosure is the dissemination of any information that could make the reader able to know about any opportunity or prospect, or of any hazard, danger, harm, threat or exposure, that has already impacted upon the company or may impact upon the company in the future or of the management of any such opportunity, prospect, hazard, harm, threat or exposure (Linsley & Shrives, 2006). Also, Beretta and Bozzolan (2004,) defined risk disclosures as a communication of information concerning firms' strategies, characteristics, operations, and other external factors that have the potential to affect expected results. Disclosure of risk is important because it helps stakeholders in getting the information needed to understand the risk profile and how the management manages risk. Disclosure of risk is also beneficial to monitor risk and detect potential problems so that they could take precaution to prevent the problem from occurring (Linsley & Shrives, 2006). Risk information is also useful for investors because it helps determine the risk profile of the company, reduce the information asymmetry, estimate the market value, and determine the investment decisions of portfolio (Abraham & Cox, 2007; Hassan, 2009).

Risk Disclosure (RD) has been defined as the communication of information concerning a firm's strategies, operations and other external factors that do have the potential to affect its expected results, the disclosure of the firm specific variances of future cash flows (Jorgensen & Kirschenheiter, 2003) and the information that describes a firm's major risks and their expected economic impacts on future performance (Linsley & Shrives, 2006; Miihkinen, 2013). More specifically, Hassan (2009) implied that RD is a set of information communicated in financial statements dealing with managers' estimates, judgments, reliance on market-based accounting policies such as impairment, derivative hedging, financial instruments, and fair value as well as the disclosure of concentrated operations, non-financial information about a firm's plan, recruiting strategy, and other operational, economic, political and financial risks.

In terms of classification, Popova (2013) indicated that RD could be divided into Mandatory Risk Disclosure (MRD) which refers to the information that is required by the accounting and business regulations, and Voluntary Risk Disclosure (VRD) which refer to the information that offers more explanation over and above the minimum requirements specified within RD-related regulations and accounting standards. In this regard, Miller (2004) argued that companies offer VRD for information users as to increase their global competitiveness.

Empirical Review

Munturi (2019) examined the relationships between corporate governance variables and the extent of risk disclosures among 48 listed non-financial companies in Kenya. Content analysis of annual reports for the period 2010-2016 was used to measure the level of risk disclosures and compute the risk disclosure index for each company studied. The relationships between variables were analysed using panel data analysis. The findings showed that the percentage of non-executive directors, ownership dispersion, percentage of foreign ownership, women in boards affected significantly the level of risk disclosures in the studied companies. This presents a timing difference as well as problem of external validity.

Kaifah et al. (2019) examined the relationship between corporate governance characteristics and risk disclosure practice. The corporate governance characteristics examined include board independence, board size, board gender, auditor independence and auditor tenure. A total of 721 companies were analyzed based on the Bursa Malaysia list from 2008 to 2017. To determine the level of risk disclosure, the study employed content analysis. Descriptive statistics and multiple regression were used to examine this relationship. The study found that, there is a positive relationship between multi-gender board and risk disclosure practice in Malaysian listed companies, and there is a positive relationship between a higher proportion of independent directors on board and risk disclosure practice in Malaysian listed companies. This current study focuses on risk disclosure quality and would be conducted in the Nigerian Industrial goods sector.

Alkurdi et al. (2019) explored the impact of CG attributes on risk disclosure of 15 Jordanian listed banks. The study employs two types of disclosure (voluntary and mandatory) and analyzed the firms' annual reports for the period of 2008-2015 to extract risk-related disclosure information and CG variables. The study utilized the Ordinary Least Squares (OLS) regression to carry out the investigation. The findings indicate that CG attributes (including board size and independent board (non-executive directors), the separation of duties and audit committee meetings) have a statistically positive impact on VRD, while this was not the case with the managerial ownership attribute. Further, the results reveal that independent directors have had a significantly positive influence on MRD, and audit committee size has had a positive significant, effect on MRD. The results suggest that firms' managers, who exhibit greater compliance with mandatory regulations, have a greater propensity to publish RD. The study was conducted in the banking sector while the current would be on manufacturing firms. More over there is also, problem of external validity.

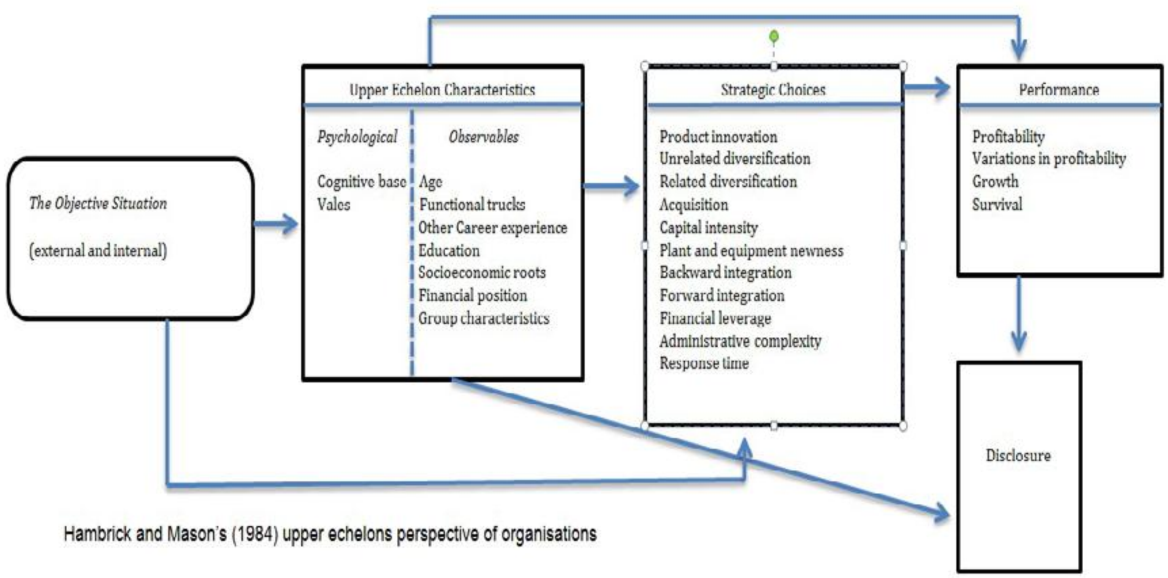
Alini and Allini (2016) examined the potential impact of the composition of the board of directors and company-specific features on risk disclosure levels in Italy where the State has had a strong presence amongst listed companies for several decades. The study analysed the risk disclosure in the MCs of SOEs listed on the Italian Stock Exchange (ISE) for the financial years 2008-2011. The aggregated variables examined include board diversity and board characteristics. To test the hypotheses, the study ran the OLS regression with robust standard errors on a basis of cross-sectional analysis. The main findings suggested that of all the variables, only board diversity significantly affects risk disclosure by SOEs. Only board diversity is considered in the current study, and the focus is on the Nigerian Industrial goods sector.

Theoretical Framework

The Upper Echelon Theory

In pioneering work by Hambrick and Mason (1984), the two concepts of the dominant coalition and demographic research were combined. The authors suggested that certain organizational effects are linked to top management teams having specific demographic profiles. Moreover, upper echelons theory proposes that the characteristics of top management, in particular demographic characteristics, might affect strategic decision- makings and hence performance. At the centre of this theory is the notion that the background knowledge and values of corporate directors' impact upon the essential strategic decisions made by these central corporate managers. Hambrick and Mason (1984) also claimed that observable attributes, e.g. age, practical experience and tenure, could function as practical proxies for the cognitive base that directs top directors' decisions. Moreover, upper echelons theory is categorized according to several important elements. As highlighted by Hambrick and Mason (1984), demographic features influence strategic decision making and performance. Thus, in this study the concept is extended to the determinants of risk disclosure, investigating whether such features of the top board could impact upon the determinants of risk reportage in the banking sector.

Figure1



Above is the adapted upper echelons framework, which is based on three fundamental principles: first, the strategic choices taken by institutions (the representations of the cognitive bases and values of the dominant players, the top board members); second, the cognitive bases and values of such players (the ramifications of their observable characteristics, such as functional trucks and education); and third, significant institutional consequences that are related to the observable characteristics of such players. In fact, this theory proposes that institutional performance is only a representation of its top board directors. However, the fourth dimension (disclosure) added to the above framework could be directly influenced by upper echelons theory characteristics or indirectly by the ramifications of the overall performance of the company, where sometimes risk disclosure would mean survival for an institution. This model also plays a vital part in determining key institutional effects, such as the provision of risk disclosure. It also grants us the opportunity to investigate the core determinants of board demography in relation to risk disclosure. This theory implies that certain organizational effects are linked to top management teams having specific demographic profiles.

Moreover, upper echelons theory proposes that the characteristics of top management, in particular demographic characteristics, might affect strategic decision-making and hence performance. At the centre of this theory is the notion that the background knowledge and values of corporate directors' impact upon the essential strategic decisions made by these central corporate managers. Moreover, this theory incorporates several important elements such as the demographic features, strategic decision making and performance. Thus, in this study the concept is extended to the determinants of risk disclosure, investigating whether such features of the top board could impact upon the determinants of risk reportage in the banking sector. Such demographic traits play an important role in determining key institutional effects, such as the provision of risk disclosure in the annual reports. This theory would also assist this investigation in interpreting the findings of the current study's second question to identify what determines risk information in the annual reports. This theory would also be employed for reinforcing the results to the second research question. It also grants this study the opportunity to investigate the core determinants of board demography in relation to risk disclosure.

This theory has only been used in fields other than disclosure. For example, Peterson et al. (2003) deployed upper echelons theory when examining the determinants of organisational performance, while Tihanyi et al. (2000) used it when exploring the effects of firm international diversification and Mutuku et al. (2008) employed it when studying the quality of decisions and performance.

METHODOLOGY

This study employs adopt ex post facto research design in examining possible causes and effect of the variables of interest. The population of the study consists of 13 industrial goods companies quoted on the Nigerian Exchange Group (NGX) as at 31st December, 2022. Since the population is small and data is found to be readily available for all companies, the study considered all for the purpose of data collection. Data were extracted from the published audited annual reports and accounts of the listed industrial goods companies in Nigeria from 2013-2022. Annual financial statements are a preferred choice for the purpose of data collection based on the type of data to be collected, availability of data to be collected and ease of results comparability.

The study employs multiple regression as the technique for analysis with aid of STATA version 16. The data for the study is panel in nature and to check for endogeneity, the study used the Hausman specification test. Additional diagnostics tests adopted in this study includes the test for Multicollinearity using the Variance Inflation Factor (VIF) and the Breutsch-Pagan test for heteroscedasticity, to check for the fitness of model and reliability of findings. The study uses board independence, size and gender diveristy as predictor variables, and risk disclosure as the outcome variable. The individual model is presented below in line with Alkabas (2016) with slight modifications.

To test the study hypotheses, the study estimates the following multiple regression model:
RDQ = f (BIND, BZ, BGD) - - - - - (1)
However, the model is econometrically stated as:
$RDQ = \alpha + \beta_1 BIND_{it} + \beta_2 BZ_{it} + \beta_3 BGD_{it} + \mu_{it}$ ………………(2)
Where:
RDQ = Risk Disclosure Quality, BIND = Board Independence, BN= Board Size, BGD= Board Gender Diversity, α = constant, it = firm *i* in time *t*, μ = error term, $\beta_{1,}$ - β_3 = coefficients

Table 1: Variables Measurement

Variables	Type	Measurement	Source
Risk Disclosure Quality	Dependent	Measured by Dichotomous "1" if a company discloses risk in the financial statement otherwise "0"	Alini and Allini (2016); Ashfaq et al. (2016)
Board Gender Diversity	Independent	Ratio of women on the board to total members on the Board of Directors	Muturi (2019); Carmona et al. (2016)
Board Independence	Independent	Ratio of independent non-executive directors to the total number of directors	Ibrahim et al. (2019)
Board Size	Independent	Total number of executive and non-executive directors on the board.	McIntyre (2007)

Source: Author's Compilation (2021)

RESULTS AND DISCUSSION

Descriptive Statistics

This section contains the description of the properties of the variables ranging from the mean of each variable, minimum, maximum and standard deviation. The summary of the descriptive statistics of the variables are presented in Table 2.

Table 2: Descriptive Statistics

Variables	OBS	Mean	SD	Min	Max
RD	130	0.4834	0.1265	0	1
BIND	130	0.1864	0.1772	0.0675	0.6355
BZ	130	8.0065	3.0195	6	14
BGD	130	0.1007	0.0644	0.00	0.2857

Source: STATA…………… Output

The mean value of the dependent variable of the study, risk disclosure (RD) is 0.4834 with a range of 0 and 1. Based on these figures, it is evident that there are large variations in the volume of risk disclosures of the industrial goods companies in their annual reports. With regard to the independent variables, Table 2 shows that the mean value of board independence ranges from a minimum of 0.0675 to a maximum of 0.6355 with a mean of 0.1864 and standard of 0.1772. The result clearly shows a wide variation of presence of external directors on the board. Also, the descriptive statistics shows values of board size to have a range of 6 and 14. This indicates a relatively wide variations in the number of the board of directors in the industrial goods sector. This is substantiated by the value of the mean which stands at 8 and the SD which is 3. On the other hand, the proportion of the female directors to the total number of directors on the board of the sampled firms varies between 0.00% to 28.57%, with an average of 10%. This finding indicates that the sampled firms have a majority of male directors on their boards and that a majority of firms do not have female members on their boards.

Correlation Matrix

The Pearson correlation analysis matrix shows the relationship between the explanatory and the explained variable and also the relationship among all pairs of independent variables themselves. This section shows that the correlation between the dependent variable risk disclosure and independent variables board nationality and board gender diversity as well as control variables firm size.

Table 3: Correlation Matrix

	RD	BIND	BZ	BGD
RD	1.000			
BIND	0.486	1.000		
BZ	0.210	-0.238	1.000	
BGD	0.068	-0,001	0.109	1.000

Source: STATA………… Output

Table 3 presents the correlation matrix for the variables used in the study. The results of the Pearson correlation analysis indicate that the extent of risk disclosure is positively correlated to board independence, with a correlation coefficient of 0.486, contrary to the first hypothesis of the study. Accordingly, the results also show that board size and board gender diversity are statistically correlated to the extent of risk disclosure, at variance with the hypotheses.

Table 4: Summary of Logistics Regression Result

FRT	Coefficient	Z	p-value
BIND	-1.0221	-2.87	0.004
BGD	3.1500	10.25	0.000
BZ	12.1366	7.55	0.000
Pseudo R^2	0.5966		
LR Chi^2	903.82		
Prob > F	0.0000		

Source: STATA……….. Output

The logistics regression result Table 4 indicates that the aggregate influence of the explanatory variables included in the model are able to explain risk disclosure up to about 59% as indicated by the Pseudo R^2 while the remaining 41% are accounted for by other board factors that are not included in the model. The F-Statistics value of 903.82, which is significant at 5% shows that the model is fit and, therefore provides substantial evidence that board attributes have significant effect on risk disclosure of quoted industrial goods companies in Nigeria.

Given the individual explanatory variables, the summary of the result in table 3 shows that board independence has a significant effect on risk disclosure of quoted industrial goods companies in Nigeria. This claim is substantiated by the p-value which is 0.004 and significant at 5% level of confidence. Hence, the study rejects the hypothesis that board independence has no significant effect on risk disclosure of quoted industrial goods companies in Nigeria.

The study also looked at the extent to which board gender diversity could influence the risk disclosure levels of quoted industrial goods companies in Nigeria. Table 4 showed that a positive and significant relationship exists between board gender diversity and risk disclosure of quoted industrial goods companies in Nigeria. This is evidenced by the value of coefficient and probability which stands at 3.1500 and 0.000 respectively. This shows that the board composing of both male and female could determine highly the extent of risk disclosure. Based on this, the study rejects the hypothesis which states that gender diversity has no significant effect on risk disclosure of quoted industrial goods companies in Nigeria.

The relationship between board size and risk disclosure was also investigated and the result from Table 4 clearly showed that board size has a positive influence on risk disclosure of quoted industrial goods companies in Nigeria. The evidence from the result showed a coefficient of 12.1366 and a p-value of 0.000, indicating a statistically significant relationship. Hence, the study fails to align with the hypothesis that board size has no significant effect on risk disclosure of quoted industrial goods companies in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Conclusion

As noted by previous studies, corporate governance codes have recognized the need to improve corporate risk disclosure and provide guidance for such disclosures. Understanding the drivers for firms to disclose risk-related information may assist regulators and standards setters in promoting both the spread and the improvement of such disclosures through the issuance of corporate governance codes and reporting. This study responds to recent calls for more research on this subject by empirically examining the effect of selected board attributes on risk disclosure of industrial goods firms quoted on the NGX from 2010 to 2019. The dependent variable of the study, risk disclosure, is measured by Dichotomous "1" if a company discloses risk in the financial statement otherwise "0". On the other hand, in the light of previous literature, three board attributes are considered; those independent variables that may have a relationship with the extent of risk disclosures of companies, namely, board independence, board size and board gender diversity.

The findings of the study reveal that board independence has a statistically significant and positive effect on the extent of risk disclosure, hence only the first hypothesis of the study is rejected. This finding supports assertion that outside directors have incentives and capability of improving information quality of financial reports by insisting on improved disclosure of voluntary non-financial disclosure. This is because external directors have a unique understanding and knowledge of outside markets' strategies that a firm wants. Thus, such knowledge may contribute additional value to the intended expansion of the company.

The study concludes that board size has significant influence on risk disclosure of quoted industrial goods companies in Nigeria. This conclusion may hold true because a larger board size encourages further oversight, provides businesses with the variety that assist them deliver essential resources and reduce ecological risks, alleviates the CEO's dominance and improves the pool of knowledge that derives from the board's diversity.

Furthermore, the study concludes that board gender diversity is related to the extent of voluntary risk disclosure. Boards are concerned with having right composition to provide diverse perspectives as greater female representation on boards provides some additional skills and perspectives that may not be possible with all-male boards.

Recommendations

Following the foregoing conclusion, that study recommends that risk arguably would continue to exist in a volatile business environment and an effective mitigation tool may come handy to improve transparency and reduce information asymmetry so the level of disclosure in both qualitative and quantitative terms is encouraged. Also, this study recommends that the Nigerian industrial goods sector compose boards with diversities, such as gender, expertise, and nationality, especially the independent directors who could bring their experiences to bear in making decisions in respect to risk information disclosures.

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EFFECT OF INVESTMENT IN PPE ON TAX AVOIDANCE OF LISTED FINANCIAL SERVICES FIRMS IN NIGERIA: DOES AUDIT SIZE MATTER?

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Abstract
This study was conducted to assess the effect of investment in Property, Plant and Equipment (PPE) on corporate tax avoidance of financial service firms in Nigeria with audit size as a moderating variable. Tax avoidance is measured by effective tax rate (ETR). The study covered the period 2015 to 2021 using 40 selected financial services firms in Nigeria. Panel data was used which consists of 280 observations analyzed using multiple regression due to the dynamic panel effect of the data. The study also conducted pre-estimation tests and post-estimation tests after estimating the Ordinary Least Square (OLS) regression model results. In order to determine the moderating role of audit size, the Wald Coefficients test was applied. This was achieved by testing the Wald equality of coefficients of audit size and the interaction of investment in PPE and audit size. The outcomes indicate that investment in PPE has positive and significant effect on ETR implying a negative and significant effect on tax avoidance of listed financial services firms in Nigeria. Furthermore, where high audit size is involved, the negative effect of investment in PPE on tax avoidance improved. From the findings, the study recommends, among others, that the auditing guidelines should lay emphasis on engagement of professional accounting firms as external auditors especially for group of companies which would go a long way in minimizing tax avoidance practices.

Key words: Audit Size, Corporate Tax Avoidance, Financial service firms, Investment in PPE

INTRODUCTION
The success of any well-established economy is the ability of its administrators to provide basic amenities required to sustain its citizens. But these responsibilities cannot be adequately fulfilled without substantive revenue source to the government. One of these sources of revenue is taxation which is a major source to some nations in the developing countries. With all the efforts by government to diversify these sources of revenue, the average individual or corporate organization would want to reduce their tax liabilities by engaging in tax avoidance practices which goes a long way in crippling government revenue. Generally, firms consider

taxes paid as an additional cost to it and its shareholders because it leads to reduction in available cash flow. Corporate tax avoidance results to serious drop in revenue accruing to the governments of a country. It is expected that all resident corporate entities pay tax on all incomes or profits accrued to them from a source within and outside Nigeria to the federal government.

The provision of Section 23 of Companies Income Tax (CIT) Act CAP. 21, L.F.N. 2004 categorized income derived by firms into taxable and non-taxable. One of the loopholes in tax administration is the capital allowance given on qualifying capital expenditure especially on PPE. Section 32 subsection (1) of CIT Act 2004 reads “where a company has incurred an expenditure on plant and equipment there shall be allowed to that company an investment allowance as provided in subsection (2) of this section and shall be in addition to an initial allowance under the second schedule to this Act”. Section 32 subsection (2) provides the rate used in computing investment allowance as 10% of the actual expenditure incurred on such plant and equipment. This implies that where a company decides to invest much on PPE, the huge amount of its investment allowance would drastically reduce its accounting profit shown on the Income Statement when computing taxable income. This would also result in high Book-tax difference (BTD) which is a signal to existence of tax avoidance in a firm.

This study is motivated by reports with respect to data on tax collections obtained from the Federal Inland Revenue Service (FIRS) indicating that there were shortfalls of targeted CIT revenue for the years 2015, 2016, 2017 and 2018 with approximately 9.6%, 47.9%, 28.7% and 19.8% respectively. These shortfalls, to a large extent, signal the existence of tax avoidance and tax evasion by taxpayers in the country. In relation to these shortfalls, the Executive Chairman of FIRS said that Nigeria loses about 15 billion dollars to tax evasion and tax avoidance annually. This is attributed to the growing mobility of income and assets that had created a major challenge for tax administrators in the country. Consequently, several billions of naira being accrued to the Nigerian government from tax revenue sources is lost to tax avoiders and evaders every year. This problem denies the government adequate revenue that could be used to execute infrastructural development projects and finance fiscal budgets (Nigerian Exchange Group (NGX, 2018). Based on the identified problem of study, it has become imperative for the study to look at the effect of investment in PPE on tax avoidance with particular reference to the moderating role of audit size in listed financial service firms on the NGX.

In line with the forgoing discussion and the objectives of the study, the following null hypotheses are formulated:
H_{01}: Investment in PPE has no significant impact on tax avoidance of listed financial services firms in Nigeria.
H_{02}: The effect of Investment in PPE on tax avoidance is not significantly moderated by the audit size of listed financial service firms in Nigeria.

Tax administrators, taxpayers, policymakers, and the government at large could all benefit from this study. As the CIT administrator, the FIRS would also be able to identify some gaps in its CIT administration as a result of this analysis and may perhaps take major steps to close those gaps. Thirdly, potential causes of business tax avoidance are of great interest to academic scholars.

LITERATURE REVIEW

The concept of tax avoidance

Tax avoidance is usually used interchangeably with tax management, tax planning and tax aggressiveness (Dyreng et al., 2008; Minnick & Noga, 2010). This indicates the wide view of the meaning of tax avoidance. Hanlon & Heitzman (2010) opined that there is no generally accepted definition for the term corporate tax avoidance. However, in recent times, tax avoidance is becoming a complex phenomenon construed in different ways by different parties depending on the motives employed. But Dyreng et al. (2008) and Hanlon and Heitzman (2010) pointed out that this definition does not differentiate between tax-favoured real activities, tax planning that is explicitly undertaken to avoid tax payments, and/or tax benefits expected from lobbying. Several studies followed to propose a new perception on the matter (Slemrod, 2004). These studies linked the theme of corporate tax avoidance with the agency theory developed by Jensen and Meckling (1976).

The concept of tax avoidance is explained in relation to tax payers' compliance to meet tax obligation. The act of non-compliance by tax payers is generally measured and compared to the amount of tax saving, tax avoidance and tax evasion meant to minimize tax liability. This is done through numerous ways ranging from tax exemptions, tax deductions, tax incentives, non-taxable income, tax suspensions, bribery and counterfeiting (Yuniarsih, 2018).

Measurement of tax avoidance

One of the main challenges faced in corporate tax avoidance studies is measurement of the phenomenon. Even though there are different opinions among tax researchers on measurement of tax avoidance, effective tax rate and book-tax difference are commonly used. Effective Tax Rate (ETR) is computed as the ratio of some estimate of tax liability to a measure of profit before tax profits which takes care of the average rate of tax per naira of income or cash flow. ETR is classified into two: the Generally Accepted Accounting Principles (GAAP) ETR and the cash ETR. The GAAP ETR is measured as the ratio of total income tax expense to income before taxation (Hanlon & Heitzman, 2010). On the other hand, the Cash ETR is computed as cash taxes paid for the year divided by total profit before tax. This measure of ETR, unlike the GAAP, is affected by tax deferral strategies but is not affected by changes in the tax accounting accruals. Another measure of tax avoidance is the book-tax differences which are defined as differences between book and tax reporting of the same transaction.

Guenther (2014) documented that any ETR value less than zero or more than one needs to be removed or set as one may result in inconsistency in the sample. The study further established that when BTDs scaled by pre-tax book income, the result is statistically equivalent to ETRs. Based on this argument, this research adopted book-tax difference as a proxy for tax avoidance.

Corporate Investment

Corporate investment is a general activity performed by a firm to obtain positive benefits for its development. Widuri et al. (2020) opine that corporate investment is seen as an action executed by firms in which specific funds are reserved with the expectation of maintaining, increasing value, or providing a positive return for the company itself. This must be done through some investment planning to derive the anticipated benefits or advantages from the investment. To avoid making an insufficient or over-investment, the leadership of the business must pay close attention to the strategy and prepare the optimal investment plan.

Nigeria has numerous tax incentives aimed at encouraging investment in key sectors of the economy. These include investment allowance, tax holidays, rural location incentives, export incentives, export expansion grant (EEG) scheme, gas utilization incentives, tourism incentives, interest incentives, foreign tax credit, and road infrastructure development and refurbishment investment tax credit scheme. An investment allowance of 10% on the cost of qualifying expenditures in respect of plant and machinery is available as a deduction from assessable profits in the year of purchase. There is no restriction to the full claim of capital allowance in any year of assessment for companies in the mining, manufacturing, and agricultural sectors.

Empirical Review

Previous studies conducted on tax avoidance practices focused on different variables affecting tax avoidance. These studies provide empirical evidences on the effect of audit quality variables and investment on corporate tax avoidance as reviewed accordingly. Studies on corporate investment and tax avoidance are very scanty. The few available do not directly link tax avoidance with corporate investment. One of these studies conducted by Park et al. (2016) investigated whether multinational corporations (MNCs) use subsidiaries to avoid taxes. From 2001 to 2010, 4,585 Korean companies were subjected to an empirical investigation by firm and year. As a result, the findings indicate a link between globally diversified MNCs and corporate tax avoidance. This correlation was established owing to the companies' active use of tax planning tools (investment tax credits, tax reductions) relevant to the numerous nations where they have grown their operations. However, when compared to businesses without foreign subsidiaries, the findings revealed that these businesses intentionally avoided tax by engaging in international transfer pricing practices. Thus, the parent company's propensity to avoid tax increased with equivalent adjustment of sales prices and purchase value through actual transactions.

Lee and Kao (2018) conducted a study to find out whether an auditor's features have any influence on the tax avoidance behaviour of their audit client after adopting the IFRS. The study used auditor industry specialization and auditor's client importance with a comparative analysis conducted before and after the implementation of IFRS. The study used investment in PPE as one of the control variables. The findings demonstrated that investment in PPE increases businesses' tax avoidance practices.

The study by Khurana et al. (2018) was conducted to assess the role of management skills in the link between investment efficiency and corporate tax avoidance using a sample of listed firms in the United States from 1994-2015. The results of the study documented that tax avoidance has a positive association with investment efficiency. The study also found that managerial ability moderates the association between tax avoidance and investment inefficiency. Ding (2019) discusses the impact that corporate tax avoidance has on the efficiency of investment from the viewpoint of information-lopsidedness and agency conflict.

The research outcomes displayed that tax avoidance is positively related to efficacy investment.

The effects of capital allowances for Nigerian companies' income tax purposes are covered by Nwonyuku (2019). In order to investigate the conceptual and regulatory rules, among other topics pertaining to the system of capital allowance, this article uses descriptive study and secondary data-gathering methods. The study's conclusions show that a capital allowance plan implemented properly would strengthen Nigerian corporate investments in valuable assets that are not current, boost tax revenue effectiveness, and develop a culture of tax compliance. Family ownership serves as a moderating factor in Pratiwi et al. (2019) analysis of the impact of company governance and audit quality as solutions to tax aggression. The ETR and BTD are used to gauge tax aggressiveness. Samples were obtained from manufacturing firms in the public sector that are listed on the Indonesia Stock Exchange. The study used investment in PPE as a control variable and found that the variable increases tax avoidance.

In their study of the connection between investment efficiency and tax avoidance in Indonesian publicly merchandized enterprises, Widuri et al. (2020) considered the interceding (mediating) influence of competition inherent in the product market. Between 2014 and 2018, information was gathered from publicly merchandized non-financial enterprises listed on the Indonesia Stock Exchange and processed using the SPSS and Warp PLS programs. According to research findings, tax avoidance and ineffective investment are positively correlated. The study showed that the existence of tax avoidance is also influenced by the managers of the company's investment choices. Asiri et al. (2020) examined the relationship between the efficiency of investment and corporate tax avoidance. Using a large sample of firms listed in the United States of America for 24 years (1993–2016), the study established that there is a positive association between inefficiencies in investment and tax avoidance activities.

Ngelo et al. (2022) examined the investment efficiency of Indonesian firms engaging in tax avoidance from 2010 to 2019 and found that there is a positive connection between tax avoidance and investment efficiency. The study also discovered that the investment efficiency of tax avoidance is prominent in both firms disposed to under and over-investment.

Theoretical Framework

The relevant theories used in underpinning studies on corporate governance mechanisms and tax avoidance are Hoffman's tax planning theory and agency theory. Corporate firms that are of the habit of redirecting corporate returns to other firms other than government purse are the main focus of the Hoffman tax planning theory (Hoffman, 1961). The sophisticated nature of tax process and structures bring about loopholes in the legal system which are unavoidable and also allow tax payers to benefit on tax position. Hoffman (1961) argued that tax planning seeks to sidetrack cash to their purse which would have flown to tax authorities. Tax planning activities are desirable to the extent that they reduce taxable income significantly, without forfeiting accounting income. The theory assumes that the tax payable by firms is a function of adjusted profits (taxable income) rather than accounting profits. The idea is thus to intensify activities that reduce taxable profits for more accounting profits.

On the other hand, agency theory specifies that the managers of the company are the agents while the shareholders are the principal. The responsibility of decision-making has been delegated by shareholders to the managers, but usually, the agents (managers) are not making decisions due to the principal's purpose. Good corporate governance mechanisms are required to checkmate activities of the agent. But in doing so, conflicts erupt between the shareholders, who are the firms' owners and its management especially where the management show an opportunistic behaviour and divert corporate wealth for their private benefit (Desai & Dharmapala, 2006; Jensen & Meckling, 1976). Therefore, this study is underpinned by both the agency theory and Hoffman tax planning theory.

METHODOLOGY

To determine the impact of independent variables on the dependent variable, this study employs a quantitative research design approach. A total of 53 financial service firms publicly trading on the NGX as of December 31, 2020, comprise the study's population. This sector is a tremendous performer in the Nigerian economy, accounting for approximately 70% of market capitalization, which justifies employing it as the study population (NGX, 2018). Appendix A displays the population as a whole. The nature of this study requires the collection and use of quantitative data obtainable from the annual financial statements of financial service firms. As such, the study adopts a filtering method in arriving at the sample size. The sample size consists of firms that were active in the sector within the period of study issuing complete financial statements consecutively during the periods of study (Suyono, 2018; Yusuf, 2018), and firms listed continuously on the NGX from 2015 to 2021. However, 12 were eliminated after applying the first filter while only UNIC Diversified Holdings Plc was eliminated when the second filter was applied. This resulted to a sample size of 40 firms which is approximately 75.5% of the population. Results obtained from the analysis would be used to generalize conclusions on the total population in the financial services companies operating in Nigeria for the period of the study. The published financial accounts of the 40 financial service firms for the study period provided data on all the dependent and independent variables. This generated a balanced panel data set of 280 observations with 40 financial service firms over seven years (2015 to 2021). Multiple regression is utilized for data analysis because of the dynamic panel effect of the data. To do this, the study conducted pre-estimation tests for normality, serial correlation, and multicollinearity. In addition, post-estimation tests for heteroscedasticity and model specification were conducted after estimating the Ordinary Least Square (OLS) regression model results. The variables specified in the models are measured in Table 1.

Table 1: Variables measurement and sources

Variable	Acronym/Type	Definition/Measurement	Sources
Effective tax rate	ETR/Dependent	Tax expense/pre-tax income	Waluyo (2017); Suyono (2018); Lestari and Nedya (2019)
Investment in PPE	IPPE/ Independent	Total Investment in PPE (in thousand naira)	Lee and Kao (2018), Pratiwi et al. (2019) and Hurley and Choudhary (2020)
Audit size	AUDS/ Moderator	Dummy variable using the value '0' for a company not audited by BIG 4 and '1' otherwise	Kanagaretnam et al. (2015); Langli and Willekens (2017)
Firm size	FSIZ/Control	Natural log of total assets	Ogbeide (2017)

Source: Authors' Compilation (2024)

To determine the moderating effect of a variable A on the connection between a dependent variable (Y) and an independent variable XY, the product of two variables XY*A signifying the interaction effect is calculated. Two regressions are then tested. The first is a test of the main effects of XY and A on Y. The second regression is conducted after introducing the interaction term (XY*A).

$Y = a + b_1XY + B_2A$ …………………………………………. (a)

$Y = a + b_1XY + B_2A + b_3XY*A$ ……………………………. (b)

When the coefficient (b3) is significant, the moderating influence of Z is said to be effective. Akremi (2005) asserts that in order to demonstrate that the addition of the moderator effect enhances the predictive power of the model, the coefficient of determination (R^2) of regression (b) must likewise be greater than that of regression (a).

The functional relationship used in the study was adopted from the work of Jihene and Moez (2019). The model is as follows:

Tax avoidance = $\beta_0+\beta_1CEO\_PAY_{it}+\beta_2CEO\_PAY_{it}*Big4+\beta_3SIZE_{it}+\beta_4LEV_{it}+\beta_5ROA_{it}+\beta_6FIN_{it}+\varepsilon_{it}$

In line with our objectives, the following relationship is established:

Tax Avoidance = f (InvestPPE)

Where Tax Avoidance is proxied by ETR, InvestPPE means investment in PPE. This provides the following model:

$ETR_{it} = \beta_0 + \beta_1IPPE_{it} + \varepsilon_{it}$ …………………..…….. 1

Prior studies such as Ogbeide (2017) and Eguavoen (2019) documented that firm size is associated with corporate tax avoidance. For this reason, this study used firm size as a control variable.

The inclusion of this control variable in model one gives:

$ETR_{it} = \beta_0 + \beta_1IPPE_{it} + \beta_2FSIZ_{it} + \varepsilon_{it}$ …………………..……….. 2

Where ETR = Effective Tax Rate

IPPE = Investment in PPE

FSIZ = Firm size

β_1, β_2 = coefficients of the estimated variables

ε = error or disturbance term

i = Number of Firms in the observation

t = Number of periods in years

In order to determine the moderating effect of audit size, the audit size variable (AUDS) and the interaction of investment in PPE variable with audit size (IPPE_AUDS) were included. This produced model three as follows:

$ETR_{it} = \beta_0 + \beta_1IPPE_{it} + \beta_2AUDS_{it} + \beta_3FSIZ_{it} + \beta_4IPPE\_AUDS_{it} + \varepsilon_{it}$ ……………….. 3

To test hypotheses 1, the following panel regression model was used:

$ETR_{it} = \beta_0 + \beta_1IPPE_{it} + \beta_2FSIZ_{it} + \varepsilon_{it}$

All variables in the model above are as described in the earlier model.

To test hypotheses 2, Wald Coefficients test was applied. This was achieved by testing the Wald equality of coefficients of AUDS and IPPE_AUDS using the estimates in equation (3).

RESULTS AND DISCUSSION

This section displays the data that was utilized in the study, paying particular focus to the summary of the descriptive statistics making use of mean, standard deviation, minimum value, and maximum value for the dependent variable and independent variables. The relationship between the dependent variable and the explanatory variables is then explained using a correlation matrix. Following the completion of pertinent robustness tests to guarantee the accuracy of the data given and analyzed, a summary of the regression results computed using Stata is offered.

Descriptive Statistics

The descriptive statistic results are displayed in Table 2 showing the mean and standard deviation, the smallest and highest values as well as skewness and kurtosis for the variables. This discussion is intended to show the patterns of all variables used in the study (both dependent and independent)

Table 2: Descriptive Analysis

Variable	Mean	Std. Dev.	Min.	Max.	Skew.	Kurt.	Obs.
ETR	0.156	0.156	-0.526	0.806	0.930	7.021	280
IPPE	33257.120	83251.110	17.486	680000	3.947	22.149	280
AUDS	0.714	0.453	0	1	-0.949	1.900	280
FSIZ	806672.5	1884616	2640.583	11700000	3.148	13.533	280

Source: Authors' computation using STATA version 15 Software

Table 2 reports the summary of one dependent variable, five independent variables, and four control variables for 40 companies over seven years. The overall mean of the effective tax rate is 0.156 with an approximate standard deviation of 0.156. This means that the effective tax rate could deviate from the mean to both sides by 15.6%. This indicates that there is no high spread from the mean of effective tax rate recorded within the period under study. The lowest ETR recorded within the period is -0.526 while the highest value of the ETR is 0.806 which is approximately 81%. The outcome demonstrates that the effective tax rate violates the premise of symmetrical distribution's criterion of zero skewness by having a 0.930 coefficient of skewness, which is positively skewed. On the other hand, it also has a 7.021 kurtosis coefficient, which is larger than the Gaussian distribution's allowed value of 3. This analysis indicates that the values of the ETR in this study are not normally distributed (Gujarati & Porter, 2009).

From Table 2, the overall average audit size is 0.714 indicating that an average of 71.3% of financial services firms employs the service of professional accounting firms as their external auditors while the remaining 28.7% engage auditing firms not among the big four. The approximate standard deviation of audit size was 0.453 (45%) which reveals high dispersion of the variable among the studied companies. The highest audit size for the period is 1 while the minimum is 0. Additionally, the skewness coefficient of -0.949, which is approximately -1, indicates that the data is negatively skewed and do not conform to a symmetrical distribution, which suggests that the value of skewness should be zero. Additionally, the results do not conform to a Gaussian distribution of 3 for kurtosis, as indicated by the kurtosis value of 1.9.

Looking at the results for investment in the PPE variable displayed in Table 2, the mean value was 33.257 billion naira with a standard deviation of 83.251 billion naira. This also indicates that there is high dispersion from the values of mean investment in PPE among financial service firms in Nigeria. However, results in Table 2 display that there is a 3.947 coefficient of skewness which is positively skewed and also violates the assumption of symmetrical distribution of zero skewness. In addition, the Gaussian distribution criterion of three for kurtosis is violated because the variable has a 22.149 coefficient of kurtosis.

The descriptive statistics results in Table 2 show that the listed financial service firms in Nigeria had an average firm size (measured by total assets) of 806.673 trillion naira, with a standard deviation of 1.885 trillion naira, indicating a wide range of variation from the mean. This suggests that the methods used to finance the assets of Nigeria's listed financial sector companies vary. The outcome demonstrates that the premise of a symmetrical distribution criterion of zero skewness is violated by the 3.148 coefficient of skewness, which is positively skewed. In addition, it also has a kurtosis coefficient of 13.533, which is greater than the Gaussian distribution's default value of 3 for kurtosis.

Data Normality Check

After analyzing the descriptive statistics of the data that was gathered for the study's variables, it is clear that the data are not normally distributed. To determine statistically whether the data of the variables used in this study follow the normal distribution or not, the study uses the Shapiro-Wilk test displayed in Table 3.

Table 3: Results of Normality test using Shapiro-Wilk W test

Variable	Obs.	W	V	Z	Prob
ETR	280	0.909	18.174	6.785	0.000
IPPE	280	0.453	109.719	10.991	0.000
AUDS	280	0.993	1.373	0.741	0.229
FSIZ	280	0.491	102.003	10.820	0.000

Source: Authors' computation using STATA version 15 Software.

Table 3 displays the outcomes of the normality test conducted using Shapiro-Wilk, given that it is the most effective normality test (Razali & Wah, 2011). All probability of the affected variables except for audit size is less than 1%. This result implies that, except for audit size, all other variables of the study are not normally distributed. As a result of this non-normality of data, the study employed Spearman rank correlation to establish the relationship between the variables of the study (Gujarati & Porter, 2009).

Multicollinearity Check

To check for multicollinearity of the data used, this study employed the Variance inflation factor (VIF) and tolerance values. The general rule of thumb holds that the VIF value of a variable must not be more than 10 and the tolerance value (the reciprocal of VIF), should be at least 0.1. The results in Table 4 show that the tolerance value and VIF for all variables are more than 0.1 and less than 10 respectively. This suggests that there is an absence of multicollinearity among the independent variables of this study (Neter et al., 1996).

Table 4: Variance Inflation Factor and Tolerance values

Variable	VIF	1/VIF
FSIZ	1.63	0.613
IPPE	1.61	0.621
AUDS	1.08	0.926
Mean VIF	1.44	

Source: Authors' computation using STATA version 15 Software

Correlation Matrix

Table 5 contains correlation values between explained and explanatory variables along with the correlation between explanatory variables themselves as adopted from the works of Beryl (2014) and Streefland (2016).

Table 5: Spearman Correlation Coefficients

Var.	ETR	IPPE	AUDS	FSIZ
ETR	1.0000			
IPPE	0.0336	1.0000		
AUDS	-0.0149	0.1033	1.0000	
FSIZ	-0.1452	0.6476	0.4199	1

Source: Authors' computation using STATA version 15 software

Table 5 shows that the amount of investment in PPE, its correlation with the ETR of financial service firms in Nigeria stands at about 3% . This points out that investment in PPE is positively correlated to the ETR of financial service firms in Nigeria. Concerning the AUDS variable, the ETR is approximately -2% negatively associated with audit size. This denotes that the greater the financial service firms patronize professional accounting firms as external auditors, the lower the effective tax rate. In addition, the results in Table 5 show that ETR negatively correlates with FSIZ at 15% . Considering the relationship between the explanatory variable (AUDS) and the control and moderating variable, the results in Table 5 depicts a range of relationship between 10%, which is AUDS and IPPE; and 65% for FSIZ and IPPE. These results show that there is an absence of multicollinearity among the regressors.

Regression results

The two results of the model using OLS and robust regression are summarized in Table 6. The results reveals that there is the existence of heteroscedasticity because the probability of the chi-square is less than 5% (0.0216). After correcting for heteroscedasticity using robust regression, the outcomes indicate that the beta coefficient of the quantum of investment in PPE is 0.048 (approximately 5%). This means that a unit change in investment in PPE leads to a 0.048% change in the effective tax rate of financial service firms in Nigeria. The positive value also signifies that a unit increase in investment in PPE, would result in a 5% increase in effective tax.

Table 6: Regression results of the effect of investment in PPE on corporate tax avoidance (Model one)

Variables	Coefficient	T-Val.	Sig
IPPE	0.048	4.29	0.000
FSIZ	-0.055	-4.62	0.000
Constant	0.285	3.51	0.001
F Stat		11.28	
F Sig		0.000	
Heterocesdasticity		chi^2 Value: (5.27)	
Test		Probability of Chi^2: (0.0216)	
hat Sig		0.001	
hatsq Sig		0.000	

Source: Authors' Computation *using STATA version 15 software*

This result implies that tax avoidance decreases with an increase in investment in PPE. Concerning firm size, a control variable, the results show negative coefficient of 0.055 which is also significant at 1% (p=0.000). This suggests that tax avoidance is not much impacted by firm size.

The cumulative results in table 6 show an F statistic value of 11.28 with probability value of (0.000). This indicates that the F statistic is significant at 1% and implies that the model of the study is fit. In addition, the significant values of both hat and hatsq (0.001 and 0.000 respectively) also confirm that there was no specification error in the model of the study.

Table 7: Robust regression results of the moderating effect of audit size on the relation between investment in PPE and corporate tax avoidance (Model two)

Variables	Coefficient	T-Val.	Sig
IPPE	0.082	2.87	0.004
AUDS	0.319	1.22	0.223
IPPE_AUDS	-0.032	-1.12	0.265
FSIZ	-0.064	-4.88	0.000
Constant	0.051	0.2	0.845
F Stat		6.72	
F Sig		0.000	
Heterocesdasticity		chi^2 Value: (-2.56)	
Test		Probability of Chi^2: (0.011)	
hat Sig		0.001	
hatsq Sig		0.000	
Wald Chi2		T Value: (1.47)	
		Probability of Chi^2: (0.2265)	

Source: *Authors' Computation using STATA version 15 software*

Table 7 above depicts a summary of the panel regression results of model two (hypothesis 2) and the Wald chi^2 test of equality of coefficients, testing the possibility that the impact which investment in PPE on corporate tax avoidance when moderated by the audit size. The decision rule for rejecting any of the null hypotheses formulated is to reject if probability is significant at 5%, and fail to reject if it is above 5%.

The Wald here tested the estimated coefficients of AUDS and IPPE_AUDS. The test result shows that indeed a difference exists between these two coefficients. That is to say the impact is actually different between the two groups. In addition, looking at the sign of the two coefficients estimated from the panel regression, one could observe that while AUDS positively impact on ETR, IPPE_AUDS negatively impact on ETR. This means that where high audit size is involved, the effect of investment in PPE on ETR improves. Notwithstanding, given that the Wald statistics is not significant at 5% level of significance (p=0.2265), the firm size variable, which is just for control purpose, is significant at 1%. The fitness of this model shows an F-statistics of 6.72 which bears a significant p-value of 1%. Other robust test carried out include heteroskedasticity test (Breusch-Pagan/Cook Weisberg) and model specification error test (link-test). The heteroskedasticity test result shows that the null hypothesis of constant variance is true, as the p-value fail to reject it even at 5%. As such, we uphold that our disturbance term is purely of random error since constant variance in the dispersion exists. The model specification error basically checks whether we need more variables in the model. Our result shows that the model is well specified (p-value of hat-squared is significant).

Hypotheses testing and Discussion of findings

Table 6 revealed that the amount of investment in PPE has a significant positive effect on the effective tax rate 1%. This points out that the more financial firms in Nigeria invest in PPE, the higher their effective tax rates. This high effective tax rate implies a decrease in tax avoidance. The above finding is not in line with the null hypothesis 1 of the study which states that investment in PPE has no significant impact on tax avoidance of listed financial service firms in Nigeria. It, therefore, follows that amount of investment in PPE plays a vital role in affecting tax avoidance of the financial service firms in Nigeria. The finding of this study contradicts the results obtained by Lee and Kao (2018), and Pratiwi et al. (2019) establishing that investment in PPE increases tax avoidance. The finding also contradicts the study of Nwonyuku (2019) which documented that capital allowance and tax compliance, prosperity, and growth in the economy in Nigeria actually have a strong and positive relationship. This finding does not agree with Hoffman's tax planning theory (Hoffman, 1961) which assumes that the tax liabilities of firms depend on taxable profits instead of accounting profits. The impression is, therefore, to strengthen activities that decrease taxable profits for more accounting profit. The theory further assumes that tax planning events are required to the point that they decrease taxable income significantly, without forfeiting accounting income.

Concerning hypothesis 2 of the study which states that the effect of investment in PPE on tax avoidance is not significantly moderated by the audit size of listed financial service firms in Nigeria, the results in Table 7 show that the Wald statistics on equality of AUDS and IPPE_AUDS is not significant at 5% level of significance (p=0.2265). This provides substantial evidence not to reject the null hypothesis 1 of the study. It implies that audit size does not significantly moderate the effect of investment in PPE on tax avoidance of listed financial service firms in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study aims at providing empirical evidence on the effect of investment in PPE on corporate tax avoidance practices among financial service firms in Nigeria and also the role played by audit size in moderating this effect. The study used effective tax rate as proxy for corporate tax avoidance. From the analysis made, it is concluded that investment in PPE has negative effect on corporate tax avoidance evidenced from the significant value established while audit size does not significantly moderate this effect.

Recommendations

In line with the above conclusion, the study recommends that the provision of Finance Act 2023 (signed into law on 28 May 2023 by former President Muhammadu Buhari) which deleted Section 32 of the CITA, which provides for reconstruction investment allowance on qualifying plants and equipment should be revisited by the present National Assembly. This would go a long way in boosting local productions and exportation by indigenous firms.

This finding has important implications for auditors and regulators. For auditors, they may consider the impact of tax avoidance and pay more attention to enterprises that have high degree of tax avoidance to identify the audit risks. For regulators, to improve the quality of transactions, restrain adverse selection behaviour and achieve more efficient markets supervision, it is imperative to reveal effective information of tax avoidance.

The research further suggested that future researches could be conducted on other corporate investment variables such as investment in bonds, securities, treasury bills so as to know their effect tax avoidance practices in Nigeria.

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SMALL AND MEDIUM ENTERPRISES GROWTH: DEPLOYING TAX INCENTIVES MEASURES

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Abstract
This study examined the impact of tax incentives on the growth of small and medium enterprises (SMEs) in Taraba State. The specific objectives were to evaluate how the Covid-19 tax relief, minimum tax and tax holiday influenced SMEs growth in terms of revenue, expansion and sustainability. The study adopted the survey research design and a closed-ended questionnaire was issued to randomly selected 364 SMEs. The data was analyzed using descriptive statistics and regression analysis. The study found that Covid-19 tax relief has a significant impact on SMEs growth. Minimum tax also revealed a significant impact on SMEs growth as well as tax holiday which showed a significant impact on SMEs growth in Taraba state. Thus, the study recommends among others that Taraba State government should strategically initiate a tax relief policy that would address the recent challenges in doing business caused by the depreciating naira value and high cost of operation in Nigeria. Further support from the government would help SMEs sustainability.

Keywords: SMEs growth, Tax incentives, Covid-19 relief, tax relief, minimum tax

INTRODUCTION

Small and Medium Enterprises (SMEs) are integral to the economic advancement of Nigeria. Previous studies indicate that in numerous developing nations, SMEs contribute to over 50% of the gross domestic product (GDP). Moreover, they serve as the primary employers, with more than 90% of the workforce being engaged in SMEs. The significance of SMEs in many developing economies cannot be overstated. According to Twesige and Gasheja (2019), the overall economic well-being of these nations is closely tied to the vitality and characteristics of SMEs. Small and Medium Enterprises are faced with numerous challenges in Nigeria hindering their effectiveness for economic growth. The positive essential role expected of SMEs on the economic growth fall below standard and this is traced to excessive tax rate imposed by the Government on the owners of SMEs, double or multiple taxation, poor or inadequate enlightenment about tax related issues as well as faulty tax regulations. According to Obafemi et al. (2021), the mortality rate of SMEs in Nigeria shows that 50% of businesses fail in their first year of operation.

SMEs are enterprises with a maximum asset base of 500 million Naira excluding land and working capital, and with a staff strength of not less than 10 and not more than 300 workers. On a broad note, SMEs operating in the Nigerian economy are mandated to operate under the legal system that regulates their operations (Adelowo et al., 2012). They could be referred to as enterprises with a total capital base of over 1.5 million Naira but not more than 500 million

Naira including working capital but excluding the cost of land and a labour size of 11–100 workers.

More than 15 incentive-related laws have been passed in Nigeria and over 20 tax-related incentives have been implemented since 1949 (Fawowe, 2013). Unlike the Caribbean, business growth seems to be on the decline in Nigeria despite the increasing tax incentives over the years. More worrisome is the explosion in the rate of unemployment and declining revenue being experienced in Nigeria, which could be attributed to the failure of SMEs.

This study hinged on the benefit to pay theory. In its use for assessing the efficiency of taxes and appraising fiscal policy, the benefit to pay theory was initially developed by Knut Wicksell in 1896 and Eric Lindahl in 1919, who were economists of the Stockholm School. According to Anyanfo (1996), this theory states that one should be taxed according to the ability to pay. It is simply an attempt to maximize an explicit value judgment about the distributive effects of taxes. This approach considers tax liability in its true form, that is, compulsory payment to the state without quid pro quo. It does not assume any commercial or semi-commercial relationship between the state and the citizens. The basic assumption of this theory is that the burden of taxation should be shared by the members of society on the principles of justice and equity and that these principles necessitates that the tax burden is apportioned according to their relative ability to pay. Both theorists opined that if the objective of the government is to redistribute income, it should set taxes according to the ability-to-pay principle.

Extant literature focused on investigating how tax incentives influence businesses in Nigeria. Studies have looked at the effect on multinationals, indigenous companies, MSMEs and SMEs (Adanlawo & Vezi-Magigaba 2022; Alhassan & Salaudeen 2022; Anim 2020; Obafemi et al., 2021; Oluwole et al., 2020;). This study examined the impact of tax incentives on the growth of SMEs located in Taraba State. Furthermore, the study:

(i) Evaluates how the Covid-19 tax relief initiated in 2020 by Governor Darius Dickson Ishaku aided SMEs growth in Taraba State.
(ii) Examines the impact of minimum tax on SMEs growth in Taraba State.
(iii) Investigates the impact of tax holidays on SMEs growth in Taraba State.

LITERATURE REVIEW

Tax Incentives

In developed countries, tax incentives often take the form of investment tax credits, accelerated depreciation and favourable tax treatment for expenditures on research and development. To the extent possible in the post-World Trade Organization world, developed countries also adopt tax regimes that favour export activities and seek to provide their resident corporations a competitive advantage in the global marketplace. Tax incentive is a deliberate reduction in or total elimination of tax liability granted by the government in order to encourage a particular economic unit to act in some desirable ways. Tax incentive is the use of government spending and tax policies to influence the level of national income. The desirable ways maybe to invest more, employ more, export more, sell more, consume less, import less and pollute less and so on (Nnubia & Fabian, 2018). Empirical studies (Twesige & Gasheja 2019; Obafemi, Araoye & Ajayi 2021; Anim et al., 2020; Adegbie et al., 2020; Olayemi & Folajimi 2021) have reported different views on tax incentives as a catalyst for the growth of SMEs in Africa.

Specifically, Taraba state in 2020 initiated Covid-19 tax relief for businesses to ease the impact of the pandemic. Tax incentive in the view of Saidu (2014) generates employment opportunities for the people, which help to fight depression, recession, inflation and economic melt-down, thereby increasing distribution of income and wealth. Tax incentive is a convenient tool to attract industries that would help to solve unemployment problem as it is considered neutral between capital incentive and labour incentive types of businesses especially in a country with surplus labour like Nigeria. Tax incentives play a minor role in influencing investment decisions in countries like Nigeria. Nonetheless, it attracts industries that solve unemployment, improve commercial profitability, establish a favorable investment climate, and draw attention to profit prospects. It also helps firms recover capital costs faster, reducing investment risk. Tax incentives also help establish a favourable investment climate, protect against currency restrictions, government instability, and foreign capital investment risks.

Covid-19 Tax Relief

The COVID-19 made a huge impact on global business activities including Nigeria, forcing the implementation of policies that restricted the movement of its citizens. This indeed struck hard on the economy and business and affected the tax compliance behaviour of SMEs in Nigeria (Kumar et al., 2020). To help out the businesses, the Nigerian government introduced an "Emergency Economic Stimulus Bill 2020" to provide for tax relief, suspension of import duty on selected medical goods and deferral of residential mortgage obligations. Employers who retained their employees from 1st of March 2020 till the 31st of December 2020 were granted tax relief but companies that were partly or wholly taxable under the Petroleum Profit Tax Act were not eligible. Deferral of mortgage payment applied to mortgages under the National Housing Fund while import duty waiver applied to medical equipment, medicines, personal protection equipment and other medical necessities required for the treatment and management of Covid-19 disease in Nigeria.

Specific to Taraba State, the government implemented a tax relief measure. All informal sector tax payers were entitled to 50% reduction in their total taxes for a duration. Back-duty assessment was reduced by 50%, penalties waived and filing deadlines extended. However, Leong et al. (2020) study in Malaysia showed that despite the stimulus package implemented by countries, income of businesses went downward. Thus, it is imperative to investigate the scenario of Taraba State, Nigeria to know how well the tax relief initiated by the government in 2020 and other tax incentives has helped SMEs.

H_{01}: Covid-19 tax relief has no significant impact on SMEs growth in Taraba State.

Minimum Tax

Minimum tax is payable by companies having no taxable profits for the year or where the tax on profits is below the minimum tax. However, companies in the first four calendar years of business, companies engaged in the primary agriculture business, or small companies are exempt from minimum tax. Minimum tax is pegged at a flat rate of 0.5% of turnover, which would be applicable to companies with no total profit or whose computed tax is less than the minimum tax. Franked investment income was excluded for the purpose of the minimum tax computation. Another amendment to the minimum tax rule was that a company with imported equity of at least 25% of its paid-up capital would no longer enjoy the exemption (Bala et al., 2020).

Small companies with a turnover of less than NGN 25 million, companies carrying on an agricultural trade or business, and companies that have been in business for less than four calendar years were exempted from the minimum tax. The new provision on minimum tax would increase the tax collectible from companies, apart from simplifying the minimum tax calculation. The idea of a total tax exemption from company income tax and value-added tax (VAT) for operating below a turnover of ₦25 Million might have created the impression that tax obligation is least important, hence, the likelihood of a repulsive attitude towards tax compliance. The Nigerian government’s intention for instituting tax exemptions for nascent and small enterprises may be economically expedient but on the flip side, the government might be creating abhorrent behaviour toward tax responsibility. An entrepreneur that is used to a total tax exception may likely explore aggressive tax avoidance and evasion strategies on the expiration of the tax holiday (Vincent et al., 2023).

H_{02}: Minimum tax has no significant impact on SMEs growth in Taraba State.

Tax Holiday

Tax holidays are a common form of tax incentive used by developing countries and countries with economies in transition to attract investment in certain sectors. Under a tax holiday, qualifying newly established firms are exempted from paying corporate tax for about five years. This may include a tax holiday of three years initially, which may be extended for up to two years upon satisfaction of specified conditions. This is governed under the Nigerian Investment Promotion Commission Act. The tax holiday was further reviewed under the Pioneer Status Incentive Regulations, 2014. In the study carried out by Twesige and Gasheja (2019), it was found that tax holiday has a significant and positive relationship with the growth of SMEs.

Pioneer companies investing in specified industrial activities may on application, be granted a tax holiday for three years initially, which may be extended for up to two years upon satisfaction of specified conditions. Examples of economic activities that may be granted a tax holiday include glass and glassware manufacturing, manufacturing of fertilizers, and steel manufacturing (Kuewumi, 1996). A new company that engages in the mining of solid minerals is exempt from tax for the first three years of its operation.

H_{03}: Tax holiday has no significant impact on SMEs growth in Taraba State.

Small and Medium Enterprises Growth

SMEs play a very important role in many developing countries. However, Nigeria's legal system has weaknesses that prevent SMEs, such as legal violations and restricted access to financing (Ishieka, 2023). Government policies have an impact on the performance of SMEs as well, and suggestions have been made to improve the industry. The impact of SMEs on Nigeria's economy may also be observed in its productive output, sales turnover, and GDP growth rate (Olayemi & Folajimi, 2021). The creation of jobs is positively correlated with government support for SMEs.

Previous literature shows that, SMEs contribute to economic expansion and job creation. According to studies, the bulk of new jobs in many developed countries are created by SMEs (Abubakar et al., 2019). SMEs also play a significant role in driving innovation and productivity. Yet, SMEs confront obstacles, such as restricted access to financing, a lack of managerial expertise, and issues entering new markets (Abubakar et al., 2019). The development of SMEs in Nigeria is greatly influenced by the involvement of the government. According to the literature assessment, the creation of SMEs has a considerable positive impact on Nigeria's economic growth (Okundaye et al., 2019). Government support is also necessary for the growth of SMEs since it aids in addressing issues like a difficult business environment and inadequate infrastructure (Taiwo & Oyedokun, 2022).

Small businesses compared to large business worldwide, face a broad scope of restriction and problems, even in effective process economic system. The limitation relates to legal and regulatory environment and business premises (at affordable rentals) and managerial expertise, access to appropriate technology, quality of the business infrastructure in poverty-stricken region and, in some suitcases, the tax burden. The restriction might vary from state to state, between rural and urban, between sectors, or between individual enterprises within a sector. The common restriction includes lack of capital, difficulties in procuring raw materials, lack of access to relevant business information, low technological capabilities, high transportation costs, communication problems, problems reason by burdensome and practical procedures and policies and regulations that generate market distortions (Atomsa, 2020).

Consequently, SMEs are essential for economic development, technological advancement, and job creation. Businesses have difficulties like restricted access to money and markets, but measures from the government could help with these issues. For SMEs to succeed, risk-taking attitudes, financial literacy, and access to capital are necessary. Depending on where they are imported from, imports could have a variety of effects on innovation. The devastating effects of the COVID-19 outbreak on SMEs have brought attention to the need for support and recovery programs.

METHODOLOGY

The study employed a survey research method which involves the use of questionnaire. This choice was made because the survey method is effective when it comes to getting opinions, attitudes, and descriptions as well as getting a cause-and-effect relationship. The population of the study included small and medium enterprises registered with the Corporate Affairs Commission (CAC) in Jalingo, Taraba State. There are 6,300 registered SMEs (CAC Jalingo). The Krejcie and Morgan (1970) sampling table was used to determine the sample size. According to the table, the sample size based on the population (N=6,300) is 364. A random sampling technique was adopted to allow all SMEs in Taraba State an equal chance of participating in the study. Out of 364 questionnaires issued, 257, which is 70.6% were retrieved. The study used a structured questionnaire to gather data from the respondents. The questionnaire was close-ended and open-ended to allow for elaborate responses. The questionnaire was adapted from Kandie (2020). Ordinary least square (OLS) was used to test the formulated hypotheses using SPSS 25.

The model of the study is expressed as follows;

$y = a + \beta_1 X_1 + \beta_2 X_2 \ldots \beta_n X_n$

$y = f$ (CTR, MT, TH)

Where $y = \alpha + \beta_1 CTL + \beta_2 MT + \beta_3 TH + \varepsilon$

Variables Definition

CTR= Covid-19 Tax Relief
MT= Minimum Tax
TH= Tax holiday
SMEsG= Small and Medium Enterprises Growth
β_0 = constant/intercept
ε = stochastic error term

RESULTS AND DISCUSSION

The results obtained from the analysis carried are presented and discussed as follows

Table 1: Regression result

Variables	Coefficient	T	Sig.
C	0.397	0.368	0.713
CTR	0.366	3.223	0.000
MT	0.653	3.426	0.000
TH	0.301	3.171	0.003
R-square	0.782		
Adjusted R-square	0.768		
F-statistics	21.058		
Sig.	0.000[b]		
Durbin Watson	2.042		

Source: SPSS 25 Output

The summary-adjusted R^2 value is 0.768. As shown by the R^2, the model accounted for only 76.8% of the variance in SMEs growth. Hence, it signifies that other factors not captured in the model contribute 23.2% to SMEs growth. Durbin-Watson digit is normally between 0 and 4; the value of 2 indicates no automatic connection among the independent variables. Values reaching 0 show positive auto-correlation and digits toward 4 show negative autocorrelation. Durbin-Watson statistic of 2.042 indicates no autocorrelation between the variables. In the examination of variance, the outcomes showed that the model is fit because of p-value $0.000<0.05$. Thus, the model was statistically significant in forecasting how tax incentives influence SMEs growth.

The result showed that CTR has a positive coefficient value of 0.366 and a p-value of 0.003. This indicates that CTR has a significant impact on SMEs growth in Taraba State, which implies that an increase in tax relief increases SMEs growth *ceteris paribus*. Hence, the null hypothesis one is rejected. The result may be occasioned by the reduction in tax liabilities implemented by the Taraba State government in 2020 to mitigate the effect of covid-19 on individuals and businesses. The relief offered a 50% reduction of taxes to the informal sector, filing of returns deadline extension, and waivers to businesses. The findings agree with Deyganto (2022) that MSMEs survival during the COVID-19 pandemic could be guaranteed through government tax incentives.

Furthermore, MT showed a positive coefficient value of 0.653 and a p-value of 0.000. This means that MT has a significant impact on SMEs growth in Taraba State. Consequently, the null hypothesis two is rejected. As businesses pay minimum tax, SMEs experience growth in terms of profitability. The positive effect, which is an indication that minimum tax is favourable to SMEs, is attributed to the fact that most of the SMEs fall below the ₦25 million turnover bracket which the Finance Act 2020 referred to as small businesses and exempted from company income tax.

Similarly, TH showed a positive coefficient of 0.301 and a p-value of 0.000. This explains that TH has a significant impact on SMEs growth. Therefore, the null hypothesis three is rejected. Tax incentive in this form allows SMEs ample time to reinvest funds for expansion that would lead to growth in their business and yield profitability.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Small and medium enterprises contribute 48% of Nigeria's GDP and employ over 84% of the workforce as reported by National Bureau of Statistics (NBS). Consequently, the implementation of tax relief measures and favourable tax policies by the government could play a crucial role in fostering the growth of SMEs. It is evident that these initiatives alleviate the financial burden on businesses, allowing them to allocate resources towards productivity and expansion. As such, policymakers should continue to consider and implement tax incentives and relief programs to support the resilience and development of SMEs, especially during challenging times. Nonetheless, the presence of conflicting findings highlights the need for continued research and policy refinement to effectively support SMEs in navigating economic challenges and driving sustainable growth.

Recommendations

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

i. Taraba State government should strategically initiate a tax relief policy that would address the recent challenges in doing business caused by the depreciating naira value and high cost of operation in Nigeria. The covid-19 tax relief has shown positive impact on SMEs growth. Further support from the government would help SMEs' sustainability.

ii. The minimum tax policy has shown a positive impact on SMEs growth in Taraba State. Nonetheless, the Federal Inland Revenue Service should monitor the records of SMEs to ensure the initiative is not misused.

iii. Tax holiday granted pioneer startups, especially in the agricultural industry, has had a significant influence on SMEs growth. Taraba State Board of Internal Revenue Service should look at tax relief initiatives that would encourage investment in technology in Taraba State in order to drive an innovative and sustainable Taraba.

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EFFECT OF FIRM ATTRIBUTES ON TAX PLANNING OF LISTED CONSUMER GOODS FIRMS IN NIGERIA.

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Abstract
This study examines the effect of firm attributes on tax planning of listed consumer goods firms in Nigeria. Ex-post facto research design is used for the study. Population of the study comprises the 21 listed consumer goods firms on the Nigerian Exchange Group (NGX), and a sample of 16 firms was selected based on two filter points sampling technique. Secondary data are extracted from the annual report and accounts of the 16 sampled firms. The study employs descriptive and inferential statistics to analyze data. Findings reveal that profitability, firm size and board independence have negative and insignificant effect on tax planning; sales growth, board size and audit committee financial expertise have positive but insignificant effect on tax planning; and leverage has negative but significant effect on tax planning. The study concludes that other factors beyond just financial performance play a more dominant role in influencing tax planning of listed consumer goods firms in Nigeria. Highly leveraged firms give more priority to risk management and financial stability over engaging in tax planning activities. The study recommends that consumer goods firms should diversify their tax planning strategies instead of relying on profitability, they should explore other avenues such as tax credits, incentives, or restructuring their operations to optimize their tax positions. Firms in the consumer goods sector should ensure continuous growth in sales as the relationship is positive though insignificant.

Keywords: Firm attributes, tax planning, listed consumer goods firms;

INTRODUCTION

Tax planning is a vital aspect of corporate financial strategy, involving the deliberate structuring of business operations to minimize tax liabilities within the legal framework. Effective tax planning could significantly enhance a firm's profitability and competitive edge. Firm attributes, such as size, profitability, leverage, sales growth, board size, board independence, and audit committee financial expertise, play crucial roles in shaping tax planning strategies. For instance, larger firms often have more resources and capabilities to engage in sophisticated tax planning techniques, benefiting from economies of scale and access to expert advice.

Similarly, highly profitable firms may have stronger incentives to engage in tax planning to reduce their tax burdens and increase net income. Consequently, firms with higher leverage might adopt tax planning strategies to maximize the tax shield benefits from interest deductions. More so, rapidly growing firms may invest in tax planning to manage their expanding financial obligations and reinvest savings into further growth. In addition, the size of a firm’s board could influence governance quality and oversight, potentially affecting tax planning activities. Larger boards may provide diverse expertise but could also lead to slower decision-making. On the other hand, a higher proportion of independent directors could enhance board oversight, potentially leading to more conservative tax planning to mitigate reputation and regulatory risks. In the same vein expertise within the audit committee is crucial for effective monitoring and guidance on tax-related issues, influencing the firm's tax planning strategies.

Additionally, in Nigeria, the consumer goods sector, which includes a diverse range of products from food and beverages to household items, plays a pivotal role in the economy. These firms, listed on the Nigerian Exchange Group, face unique challenges and opportunities in tax planning due to their high visibility, brand sensitivity, and diverse product lines. Understanding how firm attributes impact tax planning in this sector is essential for developing tailored strategies that enhance compliance and optimize financial performance.

In Nigeria, the prevalence of tax avoidance and evasion among firms poses significant challenges for tax authorities. This is compounded by a complex and often inefficient tax system, which could lead to substantial revenue losses for the government. Frequent changes in tax policies and regulations create an uncertain environment for firms, making effective tax planning more difficult such as the Finance Act, 2023. This instability could discourage long-term strategic planning and investment. Also, many firms, especially smaller ones, lack the necessary resources and expertise to engage in sophisticated tax planning. This disparity could lead to competitive imbalances within the consumer goods sector. In the same vein, despite the recognized importance of tax planning in corporate strategy, several practical and empirical problems persist globally, and particularly within the context of Nigeria and the consumer goods sector.

Additionally, existing empirical studies on the relationship between firm attributes and tax planning often yield inconsistent results. Factors such as sample size, measurement methods, and contextual differences contribute to these discrepancies. Most of the research on tax planning are concentrated in developed economies, with limited studies focusing on developing countries like Nigeria. This geographic bias restricts the applicability of global findings to the Nigerian context. While there is a body of research on tax planning and firm attributes, few studies focus specifically on the consumer goods sector. Given the unique characteristics of this sector, there is a need for more targeted research.

LITERATURE REVIEW

Profitability and Tax Planning

Adenola and Yusuf (2020) explored the effect of company characteristics on tax planning in Nigerian listed insurance companies from 2010–2018. The results of the study revealedthat profitability has a negative but significant impact on tax planning. Oktivina et al. (2020) examined the influence of profitability, leverage, company size, and institutional ownership with moderation of board gender diversification on tax planning and found that profitability has a negative effect on tax planning. The result is similar to that of Sari et al. (2021) who determined the relationship between the effect of leverage, profitability and company size on tax planning in mining sector companies listed on the ISE for the period 2014-2018. The results of the analysis showed that profitability has no effect on tax planning. Also, Ernawati et al. (2021) analyzed the effect of profitability, leverage, size of the company on tax planning through earnings management practices in manufacturing companies going public in Indonesia from 2013 to 2017. The result shows that profitability directly have a significant influence on tax planning. The periods covered by the studies are short and have limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Wilyaka (2021) examined the effect of return on assets, sales growth, leverage and capital intensity on tax planning of mining companies listed on the IDX for a period of four years from 2017-2020. The study reveals that profitability has a significant effect on tax planning. Also, Anna and Dian (2022) studied profitability, firm size and tax planning. The study used 196 observational data from financial sector companies in Indonesia. Observational data was obtained from 2019 to 2021. Multiple regression was used as a data analysis tool. The research findings show that profitability has a significant effect on tax planning. The period covered is short, none of the studies was carried out in Nigeria where there are changes in tax laws which require the need for study on tax planning. The study was carried out without applying pre and post estimation tests to validate the robustness of the data.

Mukti and Fajriah (2022) analyzed, observed and tested the effect of corporate risk, sales Growth, and profitability on tax planning of food and beverage sub-sector companies listed on the IDX within the period of 2018-2020. The analytical method used is multiple linear regression analysis with the help of the SPSS statistical program. Findings showed that profitability has no significant effect on tax planning. The period covered by the study is short and also has limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Sales Growth and Tax Planning

Wilyaka (2021) examined the effect of return on assets, sales growth, leverage and capital intensity on tax planning of 12 mining companies listed on the IDX for a period of four years from 2017-2020. The study adopted quantitative research. The data analysis technique used in the study is multiple linear regression. The conclusion of this study is that sales growth has no effect on tax planning. The study covered only four years from 2017 to 2020 which is not sufficient and was carried out outside Nigeria.

Muti'ah and Ahmad (2021) analyzed the effect of sales growth, debt equity ratio (DER) and related party transaction on tax planning. The method of analysis of this research is multiple linear regression. The results showed that sales growth has a negative and significant effect on Tax planning. The study used multiple linear regression and failed to carried out advance tests such as normality test, multicollinearity, Hausman test, among others.

Adejumo et al. (2022) investigated the dynamic effect of firm size on tax planning. The study used the Generalized Method of Moment (GMM) for data from 17 purposively selected companies from 2012 to 2017. Sales growth was found to exert significant but negative influence on tax planning. The period covered by the study is not sufficient. The study also failed to include moderating variable to differentiate it from existing studies.

Siyanbola (2022) examined the effect of firm attributes on tax planning of selected firms in Nigeria. The study used quantile regression to analyse secondary data extracted from the financial statements of the selected firms. The study found a positive effect of sales growth on book-tax difference residual (BTDR). Conversely, Tanko et al. (2022) investigated the effect of firm growth on tax planning in listed manufacturing firms in Nigeria. The study analysed data from 35 listed manufacturing firms using panel least square regression. The results showed a negative effect of sales growth on the tax planning, indicating that sales growth decreases tax planning. The result is consistent with that of Mukti and Fajriah (2022) who found that sales growth has a negative but significant effect on tax planning. The period covered is short, and the study did not incorporate moderating or mediating variable to differentiate it from existing studies.

Salsabila (2023) examined the effect of transfer pricing and sales growth on tax planning of listed trading companies from 2016 to 2021. The study adopted quantitative with a causality approach and data collected was processed by descriptive analysis and statistical models. Finding from the study showed that sales growth has a negative and insignificant effect on tax planning. The study was carried out without applying pre and post estimation tests to validate the robustness of the data. In addition, Tanko (2023) and Maigoshi and Tanko (2023) document negative effect of sales growth on tax planning of listed manufacturing firms in Nigeria.

Leverage and Tax Planning

Adenola and Yusuf (2020) examined company characteristics and tax planning in Nigerian listed insurance companies from 2010–2018. The results of the study revealed that leverage has a positive and significant impact on tax planning. This is similar to Sari et al. (2021) who determined the relationship between the effect of leverage, profitability and company size on tax planning in mining sector companies listed on the IDX for the period 2014-2018. The results of the analysis showed that leverage has an effect on tax planning.

The study of Ernawati et al. (2021) analysed the effect of profitability, leverage, and size on the tax planning through earnings management practices of 66 manufacturing companies in Indonesia for a period of five years from 2013-2017. The sample used is determined by purposive sampling technique. The data analysis technique used were descriptive analysis and linear regression analysis. The results found evidence that leverage has a significant influence on tax planning. This is consistent with Wilyaka (2021) who found that leverage has a significant effect on Tax planning. The period covered by the study is short.

Ezekwesili and Ezejiofor (2022) investigated the effect of leverage on tax planning of Nigerian consumer goods firms. The study employed ex-post facto research design. The study covered a period of nine financial years from 2012-2020. The data were analyzed using descriptive statistics and hypothesis was tested with regression analysis. The study found that leverage has no significant effect on tax planning of Nigerian consumer goods firms. The result agrees with that of Mukti and Fajriah (2022) who found that leverage has a positive and significant effect on tax planning. The period covered by the study is short and has limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Firm Size and Tax Planning

Dewi and Yasa (2020) obtained empirical evidence on the effect of executive characteristics, profitability, leverage, capital intensity and firm size on tax planning. This research was conducted on manufacturing companies listed on the IDX from 2016–2018 and found that company size had a positive effect on tax planning. Conversely, Oktivina et al. (2020) examined the influence of profitability, leverage, company size, and institutional ownership with moderation of board gender diversification on tax planning using a sample of four automotive sector manufacturing companies listed on the IDX and found that company size has a negative effect on tax planning. The studies were carried out without applying pre and post estimations tests to validate the robustness of the data. More so, the period covered by the studies are short.

The empirical analysis undertaken by Adenola and Yusuf (2020) examined company characteristics and tax planning in Nigerian listed insurance companies. The study assessed the impact of firm size, profitability, leverage and firm age on tax planning. The study adopted ex-post facto research design, and data was drawn from the audited annual reports of 20 random sample listed insurance companies between 2010–2018. The model of the study was estimated using a two–step system GMM panel model estimator. The results of the study revealed that firm size has a positive and significant impact on tax planning.

Similarly, another finding was documented by Sari et at. (2021) who determined the effect of leverage, profitability and company size on tax planning in mining sector companies listed on the IDX for the period of five years from 2014-2018. The study employed descriptive and explanatory research method. Data used are financial reports from a total purposive sample of 21 companies in the mining sector. The results of the analysis showed that company size has an effect on tax planning. Ernawati et al. (2021) also analysed the effect of profitability, leverage, and size tax planning through earnings management practices in manufacturing companies going public in Indonesia from 2013 to 2017. The result showed that firm size directly has a significant influence on tax planning. The period covered by the studies are short and have limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Adejumo et al. (2022) investigated the dynamic effect of firm size on tax planning. The study used the GMM for data from 17 purposively selected companies from 2012 to 2017. The result of the finding reveals a significant positive effect of firm size on tax planning. The studies were carried out without applying pre and post estimation tests to validate the robustness of the data. More so, the studies have limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Board Size and Tax Planning

Peter et al. (2020) examined the effect of board attributes on tax planning of listed non-financial companies in Nigeria. The study discovered that board size has insignificant positive effect on tax planning of the listed non-financial companies in Nigeria. Michael and Udeh (2022) investigated the influence of corporate governance structure on tax planning. The longitudinal research design was used for the study and the sample for the study comprises 35 manufacturing companies quoted on the NGX covering the period of 11 years from 2008-2018. Panel regression was used to estimate the model for the study. The results reveal that board size has a positive and significant effect on tax planning. The studies have limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Adejumo et al. (2022) investigated the dynamic effect of firm size on tax planning. The study used the GMM for data from 17 purposively selected companies from 2012 to 2017. The result found that board size has insignificant positive effect on tax planning. The study does not have large sample size and the period covered is not recent.

Okoh and Ofor (2022) investigated corporate board attributes and tax planning of 75 non-financial firms in Nigeria for the period of 10 years from 2012 to 2021, and ex-post facto research design was adopted. The data collected was analyzed using panel least squares regression. It was found that board size had negative and insignificant effect on tax planning of listed non-financial firms in Nigeria. Akhor and Inegbedion (2023) also examined board features and tax planning of listed manufacturing companies in Nigeria for the period 10 years from 2011 to 2020. The study employed descriptive statistics, correlation matrix and panel regression technique as tools of analysis. Results revealed that board size was positively but insignificantly related to tax planning. The studies have limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Akims and Akims (2023) examined the effect of board of directors' characteristics on corporate tax planning of manufacturing and allied firms listed on the Nairobi Securities Exchange, Kenya. The study found that board size had insignificant negative effect on tax planning. Hence, the study concluded that amongst different board of directors' characteristics, independence is most important in predicting the tax planning. Specifically, a board of directors with greater independence would ensure better corporate tax planning of firms. Eguavoen et al. (2023) also found that board size was positively and significantly related to tax planning in a study on board attributes and tax planning of corporate organizations in Nigeria.

The studies were carried out without applying pre and post estimation tests to validate the robustness of the data. More so, the studies have limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Board Independence and Tax Planning

Peter et al. (2020) examined the effect of board attributes on tax planning of listed non-financial companies in Nigeria. The study adopted quantitative research method. Data for the study was collected from the sampled companies for a period of 10 years from 2008 to 2017. The data collected was analyzed using descriptive statistics to provide summary statistics for the variables, and correlation analysis was carried out using Pearson product-moment correlation to determine the relationship between the dependent and independent variables. Regression analysis was adopted to test the hypotheses of the study. The study revealed that board independence has a significant but negative effect on tax planning. The study has limitation of not incorporating moderating or mediating variable to be differentiated from existing studies.

Salihu and Kawi (2021) investigated the relationship between board attributes and corporate tax planning of 100 Malaysian companies based on FTSE tradable index. The study adopted quantitative approach and data was analyzed using the GMM technique. The analysis shows board independence has positive and significant relationship with tax planning. The analysis of the interview responses shows that the members of the board have little influence on the choice of the company's tax management strategy. The study was carried out without applying pre and post estimations tests to validate the robustness of the data. More so, the study has limitation of not incorporating moderating or mediating variable to be differentiated from other studies.

Okoh and Ofor (2022) also found that board independence has positive and significant effect on tax planning of listed non-financial firms in Nigeria. The study concluded that attributes of the board might have little or no impact on the tax planning as the directors are not responsible for a firm's tax management strategy. Also, Akhor and Inegbedion (2023) examined board features and tax planning of listed manufacturing companies in Nigeria and found that board independence was positively and significantly related to tax planning.

Akims and Akims (2023) examined the effect of board characteristics on corporate tax planning of nine manufacturing and allied firms listed on the Nairobi Securities Exchange, Kenya. Following the explanatory research design, data from the sampled firms for the period of 10 years from 2010 to 2019 was analyzed based on descriptive and inferential statistics. The results revealed that board independence has significant negative effect on tax planning. On the other hand, Eguavoen et al. (2023) investigated board attributes and tax planning of corporate organizations in Nigeria. 85 non-financial companies that are found to be quoted on the NGX were cautiously picked and carefully analyzed for the period of five years from 2016 to 2020. Panel least squares regression was adopted to analyse the data. The result indicated that board independence was negatively and insignificantly related to tax planning. The period covered by the studies is short.

Audit Committee Financial Expertise and Tax Planning

Sylvester and Okoh (2022) investigated audit committee attributes and tax planning of 75 listed non-financial firms in Nigeria for a period of 10 years from 2012-2021. Hypotheses formulated were tested using panel least squares regression and fixed effect regression. Findings show that audit committee financial expertise has positive and significant effect on tax planning of listed non-financial firms in Nigeria.

METHODOLOGY

The study adopted ex-post facto research design, longitudinal design and correctional research design was adopted because the studies evaluated how firm attributes and tax planning may impact the consumer goods sector in Nigeria over time, with 10 years period set for the study and the panel nature of data and to investigate the relationships between firm attributes and tax planning without controlling or manipulating any of them. A correlation reflects the strength and/or direction of the relationship between variables. The study used 16 consumer goods firms listed on the floor of Nigerian Exchange Group out of the 21 firms based on availability of data and years of listing. The variables of the study are shown in Table 1.

Table 1: Variables and their Measurement

Variable	Measurement	Source(s)
Tax planning (Dependent variable)	Residual of Book Tax Difference.	Santana and Rezende (2016); Siyanbola (2022)
Profitability (Independent variable)	Profit Before Tax Divided by Total Assets.	Dewi and Yasa (2020); Rani et al. (2018)
Sales Growth (Independent variable)	Current Year Sales Minus Previous Year Sales Divided by Previous Year Sales.	Siyanbola (2022)
Leverage (Independent variable)	Short-Term And Long-Term Debt by Total Assets.	Ernawati et al. (2019); Putra et al. (2020)
Firm Size (Independent variable)	Logarithm of Total Assets at the End of Each Financial Year.	Kartiningsih and Wardiyah (2020); Tahir (2017)
Board Size (Independent variable)	Number of Directors on the Board, i.e. Executive Plus Non-Executive Directors.	Bala (2019); Ogbeide and Obaretin (2018)
Board Independence (Independent variable)	The variable was measured by number of non-executive director of the board divided by the total number of the board members.	Salihu and Kawi (2021)
Audit Committee Financial Expertise (independent variable)	Number of Audit Committee Members with Accounting and Financial Skills Divide by the Total Number of Audit Committee Members	Amelia and Anies (2021)

Source: Researchers' Compilation (2024)

The study employed two techniques to analyse the data generated from for the study. These are: Descriptive statistics and inferential statistics. Descriptive statistics was used in the study to compute summary statistics that describe the central tendency, normality and variability of the data set. This tool was used in the description of both the dependent and independent variables. The maximum, minimum and mean are used to analyse the central tendency of the data set. In addition, inferential statistics is the use of different analytical tools to draw conclusion that have been obtained from one experimental study to a more general population. In order to examine the effect of firm attributes on tax planning, multiple regression analysis was used. This was the primary method to test hypotheses regarding the relationships between firm attributes and tax planning (Sanni et al., 2020). Correlation analysis and Generalised Least Square (GLS) models were employed to examine the combined and individual effects of different variables.

The general econometric models adopted for the study was modified from the study by Ilaboya et al. (2017). The model is specified thus:

$$BTDR = \beta0_{it} + \beta_1 ROA_{it} + \beta_2 SGW_{it} + \beta_3 LEV_{it} + \beta_4 FS_{it} + \beta_5 BS_{it} + \beta_6 BI_{it} + \beta_7 ACFX_{it} + \varepsilon_{it} \quad \ldots\ldots \text{ ii}$$

Where:

BTDR = Book tax difference residual
ROA = Return on assets
SGW = Sales growth
LEV = Leverage
FS = Firm size
BS = Board Size
BI = Board Independence
ACFX = Audit Committee Financial Expertise

i = firms 1 – 16
t = The financial years 2013 – 2022
β_0 = The intercept
$\beta_1 - \beta_7$ = The slope coefficient of explanatory variables
ε = error term.

RESULTS AND DISCUSSION

Table 2: Descriptive Statistics

Variables	Obs.	Mean	Std. Dev.	Minimum	Maximum
BTDR	160	0	0.1580	-1.8099	0.2039
ROA	160	0.0887	0.1912	-0.1920	2.0652
SGW	160	0.1323	0.3263	-0.9833	2.3019
LEV	160	0.1855	0.5605	0	6.8971
FS	160	7.7905	0.6595	6.1781	8.9168
BS	160	10.0875	2.5288	4	17
BI	160	0.5959	0.1826	0.2	0.9286
ACFX	160	0.1907	0.1251	0	0.5

Note: Stata 14 output based on data extracted from listed consumer goods firms from 2013-2022

Table 2 reveals that book-tax difference residual is at 0 on average. This implies that on average, there is no systematic opportunities for tax planning based on difference between book tax and the actual tax values. The standard deviation stood at 0.1580. This indicates a wide variation around the mean since the standard deviation is higher than the mean. This is supported by maximum of 0.2039 and minimum value of -1.8099. Table 2 also shows that the average profitability for the listed consumer goods firms is 0.0887 which indicates that on average consumer goods firms had a gain of 8.87%. Also, the table shows a minimum loss of 19.20% and a maximum profit of 206.52% and a standard deviation of 19.12%. This indicates wide variation around the mean. Similarly, the low mean profitability of listed consumer goods firms indicates poor performance on average. Also, the minimum of 19.20% is the loss of -₦289,397.00 incurred by Nigerian Enamelware Plc in 2021 against its total assets of ₦1,507,040.00. This occurs despite the good performance by most of the firms within the sector in the year 2021.

Sales growth in Table 2 reveals that on average, the sampled firms experienced slow growth in sales with a mean of 0.1323 which indicates 13.23% growth level in sales. The minimum value of -0.9833 shows that some of the firms in the sample experienced a decline or slow growth in sale from one year to the other during the period of this study, such as Dangote Sugar Refinery Plc in 2013. The maximum value of 2.3019, when compared with the minimum value, represents a range of more than 2 times. In addition, the standard deviation is 0.3263, which is higher than the mean value. This indicates a wide variation in the sale growth among the sampled firms.

The mean average of leverage is 0.1855 for the sampled firms. This indicates that on average the sampled firms used about 19% of debt to finance their business while 81% of their business was financed by equity. The standard deviation of 0.5605 indicates that there is wide variation around the mean of leverage since the standard deviation is greater than the mean. The minimum is 0 and the maximum of 6.8971. The zero minimum is as a result of the normal gearing of some firms including Cadbury Nigerian Plc, Champion Brewery Plc, Dangote Sugar

Refinery Plc, Honeywell Flour Mills Plc, Nascon Allied Industries Plc, Nigerian Enamelware Plc, Northern Nigeria Flour Mills Plc, PZ Cussons Nigeria Plc, and Unilever Nigeria Plc while the maximum is as a result of high gearing of ₦58,570,387.00 against shareholder funds of ₦8,491,986.00 contracted by Northern Nigeria Flour Mills Plc in 2020.

The Table also provides evidence that firm size is 7.7905 on average with a minimum of 6.1781 and a maximum value of 8.9168. The minimum and maximum values log of total assets of Nigerian Enamelware Plc with total asset of ₦1,507,040.00 and Mcnichols Plc with total assets of ₦825,689,552.00 in 2021 and 2018 respectively. The standard deviation is 0.6595 which points to the fact that there is no variation among the sampled firms. Also, Table 2 reveals that board size on average is 10.0875 with a minimum number of 4 directors and a maximum of 17 directors. The standard deviation is 2.5288, which points to the fact that there is no variation among the sampled firms. This is because the standard deviation is lower than the mean.

Also, the table provides an average board independence of 0.5959 which indicates that consumer goods firms board of directors is 59.59% independent with a minimum of 0.2 that is 20% independence and a maximum of 92.86% independence. The standard deviation is 0.1826 which points to that there is no variation among the sampled firms; this is because the standard deviation is lower than the mean. Similarly, audit committee financial expertise has a mean of 0.1907 with shows an average of 19.07% compliance to the regulatory requirement by CAMA 2020 of having financial expertise as members of audit committee of firms and a standard deviation of 0.1251, which implies that there is no variation of the sampled audit committee financial expertise. The minimum and maximum values stood at 0 and 0.5 respectively.

Correlation Analysis

The correlation shows the extent of the relationship between the independent variables to test the presence of multicollinearity. The correlation coefficients in the study are presented in Table 3.

Table 3: Correlation Matrix

VAR.	BTDR	ROA	SGW	LEV	FS	BS	BI	ACFX	VIF
BTDR	1.0000								
ROA	0.1800	1.0000							2.65
SGW	0.0109	0.1783	1.0000						2.46
LEV	0.2159	-0.0591	0.1933	1.0000					1.18
FS	-0.0002	0.1857	0.1291	0.1351	1.0000				1.14
BS	0.2586	-0.0630	0.0751	0.1141	0.1055	1.0000			1.06
BI	-0.2102	0.0377	0.0345	-0.1294	0.1516	0.0163	1.0000		1.03
ACFX	0.0549	0.0636	0.0365	0.1622	0.1094	-0.0974	-0.0014	1.0000	1.02

Note. Stata 14 output based on data extracted from listed consumer goods firms from 2013-2022

Table 3 reveals the correlation coefficients between the dependent variable and the independent variables of the study displayed in a correlation matrix obtained from Spearman correlation coefficient between all the pairs of the research variables. The choice of the Spearman correlation was because of the relationship between variables in the normality test of Shapiro Wilk which indicates that the data are not normally distributed. The Shapiro Wilk test for book-tax difference residual, return on assets, sales growth, leverage is 0.0000 which is significant at 1% level of significance while firm size, board size, board independence, Audit committee financial expertise are insignificant.

Table 3 reveals a positive relationship between tax planning with profitability, sales growth, leverage, board size and audit committee financial expertise at correlation coefficient of 0.1800, 0.0109, 0.2159, 0.2586 and 0.0549 respectively. Also, the coefficient of -0.0002 and -0.2102 for firm size and board independence indicates a negative relationship with tax planning. However, the correlation coefficient of return on assets, sales growth, leverage, firm size, board size, board independence and audit committee financial expertise indicate the direct relationship between firm attributes and audit committee financial expertise and tax planning is weak.

The results suggests that tax planning and profitability, sales growth, leverage, board size, and audit committee financial expertise move in the same direction. This means that any increase in those independent variables would lead to an increase in tax planning. On the other hand, any increase in firm size and board independence will lead to decrease in tax planning these is because the variables move in opposite direction. Generally, the correlation coefficient of the interrelationship among the independent variables does not point out any presence of harmful multicollinearity. This is supported by Variance Inflation Factor (VIF) which all are less than 10. The lowest VIF is 1.02 for audit committee financial expertise and the highest VIF is 2.65 for profitability.

Regression Diagnostic Tests

Normality of Residuals

Table 4: Shapiro-Wilk W test for normality Dependent Variable Residuals

Variable	**Observation**	**W**	**V**	**Z**	**Prob>z**
Model	160	0.98268	2.131	1.721	0.5266

Note. STATA 14.0 Output

The study uses the Shapiro Wilk test, with hypothesis that the error term in the distribution is normally distributed. The result as displayed in Table 4 shows that the p-value for model is insignificant, indicating that the residuals of the distribution is normally distributed. This shows that the residual's deviation from normality is not much and is negligible. Therefore, the study concluded that the residuals are nearly normally distribution.

Multicollinearity

In Table 3 the correlation coefficients and variance inflation factor (VIF) reveal the absence of harmful relationship among the independent variables. The maximum VIF is 2.65 for return on asset and minimum VIF is 1.02 for audit committee financial expertise. Also, the correlation matrix reveals that none of the explanatory has relationship of 0.8 or more with each other, indicating the absence of multicollinearity.

Homoscedasticity of the Residuals

The study uses Breusch–Pagan–Godfrey Test to affirm the compliance of the research model with the assumption. The results obtained from the test for heteroscedasticity shows a p-value of 0.0029 as show in Table 6. The results indicated that the probability value is significant at

1%, which implies that the variance of the residuals is not constant. In order to solve the problem of homoscedasticity of the residuals, the study employed the robust fixed effect.

Hausman Specification Test

Table 5: Hausman Specification Test

Variable	Chi2	P-value
Model	15.53	0.0165

Note. STATA 14.0 Output

The study uses the Hausman Specification test to examine the presence of endogenous independent variables in the models because of its possibilities to cause the OLS estimators to fail. The results show a chi-square probability of model one is 0.0165, which is significant at 5% because unique error is correlated with the regressors. The result shows that a fixed effect is most appropriate.

Table 6: Panel Regression Results

Variables	Coef.	Z	p>/z/
Constants	0.1210	0.73	0.465
ROA	-0.0662	-0.84	0.402
SGW	0.0291	1.18	0.236
LEV	-0.2360	-12.01	0.000
FS	-0.0072	-0.37	0.713
BS	0.0023	0.77	0.439
BI	-0.0914	-1.73	0.084
ACFX	0.0635	1.19	0.234
Overall R^2		0.7509	
Wald Chi2/F-Sta.		3697.91	0.0000
Hausman		13.53	0.0602
LM chibar2		15.92	0.0000
Hettest Chi2		8.26	0.0040

Note. Stata 14 output based on data extracted from listed consumer goods firms from 2013-2022.

Table 6 reveals an overall R-square value of 0.7509. This indicates that approximately 75% of the variance in the BTDR could be explained by the independent variables. Furthermore, R-square value suggests a moderate level of explanatory power (Hair et al., 2018; Tanko & Siyanbola, 2019). This means that factors other than those included in the model are likely to influence the tax planning of listed consumer goods firms in Nigeria. However, the variables included in the model collectively account for about 75% of the firm variables' variability in model, while the remaining 25% variation is caused by other factors not captured in the study models.

The result reveals that there is a negative and statistically insignificant relationship between profitability and tax planning at a coefficient of -0.1185 and a p-value of 0.286. This implies that an increase in the profitability of the sampled firms would lead to ineffective tax planning strategy thereby increasing the tax liability of the firm and reducing the overall profitability of the firm. In addition, the -0.1185 coefficient on profitability suggests that a percentage increase in profitability would result to ineffective tax planning strategies of the sampled firms by

11.85% which is insignificant so long as other explanatory variables remain constant. This implies that firms with higher profitability may face difficulties when engaging in tax planning.

The findings support agency theory which explained that managers may prioritize their own interest over that of the shareholders which may lead to sub-optimal decision-making regarding tax planning strategies. In such cases, managers may focus on increasing profitability without considering the implication of high tax liability. This finding from this study agreed with that of Mukti and Fajriah (2022), who found that profitability has a negative and insignificant effect on tax planning. However, the result disagreed with the finding of Iriyadi et al. (2019), who found that profitability has a positive and significant effect on tax planning.

Table 6 also reveals that sale growth has a positive but insignificant impact on tax planning. This relationship between sales growth and tax planning presents a coefficient of 0.0394 and a p-value of 0.137, indicating that while sales growth increases, tax planning strategies of the sampled listed consumer goods firms in Nigeria would also increase, though the influence may not be significant. This also reveals that other factors other than sales growth may have more significant impact on tax planning strategies of the firms in the sector.

The findings disagreed with Hoffman's tax planning theory which supports firms to redirect corporate returns to other firms other than flowing to government authorities as tax. Therefore, even with a positive growth in sales, when managers are more concerned with personal incentives or short-term performance, they may not pay attention to long-term performance and diversification in order to reduce taxable income and engage in other tax planning opportunity that comes with sales growth. The finding of the study is in line with the finding of Wilyaka (2021), but is contrary to the finding of Muti'ah and Ahmad (2021), which document negative but significant influence of sales growth on tax planning.

Furthermore, Table 6 presents the result on the effect of leverage on tax planning. The result indicates that leverage has a negative but significant impact on tax planning at 1% level of significance with a coefficient value of -0.2206 and a p-value of 0.000. The negative but significant relationship suggests that firms in the consumer goods sector with high level of leverage tend to engage less aggressively in tax planning strategies. This could be due to increased interest expenses reducing taxable income, limiting the effectiveness of certain tax saving techniques.

The finding did not align with Hoffman's tax planning theory which supports firms to redirect their corporate returns to other investment rather than flowing it to government authorities as tax payment. Sampled firms in the consumer goods sector prioritize risk management creditors concern and regulatory compliance over aggressive tax planning strategies in certain circumstances. This finding is in line with the finding of Ogbeide (2017), who documented the negative but significant effect of leverage on tax planning, but disagreed with the finding of Irianto et al. (2017).

Table 6 shows that firm size has a statistically insignificant negative impact on tax planning at a coefficient value of -0.0697 and a probability value of 0.174. This shows that size of the firm does not influence tax planning activities. The result also indicates that any percentage increase in firm size would lead to poor tax planning activities in the firm by 6.97%. This could be suggested that good tax planning strategies and implementation is not associated with firm size, which means that smaller firms may engage in tax planning activities more aggressively compared to larger firms despite the economies of scale, brand recognition and greater access to resources that the big firms might have.

The findings of the study disagree with positive accounting theory and aligns with agency theory which states that managers prioritize their own interest over those of the shareholder, leading to sub-optimal decision regarding tax planning. Smaller firms' ownership and management may be more closely aligned; managers may have less incentive compared to the big firms. Having much incentives may distract the managers and make them lose focus towards taking decision and engaging aggressively in tax planning activities. Therefore, negative and insignificant effect of firm size on tax planning could reflect more conservative approach by managers to minimize potential risk and conflict of interest. The finding supports that of Oktivina et al. (2020), who discovered that firm size has negative effect on tax planning. However, the result disagreed with that of Adejumo et al. (2022), who revealed that firm size has positive impact on tax planning.

Table 6 also pointed out that board size has a negative insignificant statistical impact on tax planning at a coefficient value of -0.0031 and a probability value of 0.369. The result implies that any percentage increase in board size, would lead to decrease in tax planning activities by 0.31% which shows that the decrease in tax planning is insignificant. Firms with large number of board of directors' members might not be effective in taking strategic decision concerning tax planning activities. This implies that other factors other than board size may be of more significance in influencing tax planning strategies formulation and implementation.

Furthermore, negative and insignificant effect of board size on tax planning aligned with agency theory which state that managers prioritize their own interest over those of the shareholder, leading to sub-optimal decision regarding tax planning. This theory provides reasons why board size may not have a significant impact on tax planning activities despite its potential role in governance due to complex interplay of managerial discretion, resources availability in shaping tax planning strategies and implementation. Finding from this study also support the finding of Okoh and Ofor (2022), who documented that board size has positive effect on tax planning. On the other hand, the result disagreed with the findings of Onatuyeh and Odu (2019), who revealed that board size has positive impact on tax planning.

Table 6 further presents result regarding the effect of board independence on tax planning. The result showed that the number of non-executive directors against the total number of directors, which was used as the measurement of board independence, has negative and insignificant effect on tax planning at a coefficient value of -0.0990 and a p-value of 0.272. The negative and insignificant relationship suggests that for any increase in the level of board independence, there would be a decrease in tax planning activities by 9.90%. While a higher level of board independence could increase well informed decision that is independent of management influence, the result in this model is statistically insignificant. More so, this indicates that a percentage increase in board independence, while other factors variables remain constant, would lead to poor engagement in tax planning activities by the sampled firms.

This finding aligned with agency theory, indicating that, if managers have significant influence over tax planning decisions, the independence of the board may not effectively mitigate agency problems related to tax planning of the consumer goods firms in Nigeria. This finding is in line with the finding of Eguavoen et al. (2023), who documented the negative effect of board independence on tax planning, but disagreed with the finding of Akhor and Inegbedion (2023).

Table 6 also shows that the coefficient of audit committee financial expertise is 0.0635 in model two and a probability value of 0.234. This indicates that the direct relationship between audit committee financial expertise and tax planning is positive but insignificant. The positive and statistically insignificant relationship indicates that the committee might have limited focus on tax planning strategies and implementation. The provision of CAMA 2020 states that all members of the audit committee should be financially literate which means the members must have knowledge, skills, experience and/or academic background in finance and at least one member shall be a member of a professional accounting body in Nigeria (ICAN or ANAN) established by an Act of the National Assembly. It is made in such a way that the committee members could advise and oversee financial matters including tax activities. This finding is consistent with that of Sylvester and Okoh (2022), who report a positive influence of audit committee financial expertise on tax planning.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Despite the importance of profitability in measuring performance of a firm, other factors beyond just financial performance play a more dominant role in influencing tax planning of listed consumer goods firms in Nigeria. Though sales growth reflects business expansion, its insignificant effect on tax planning shows the complexity and diverse nature of tax planning strategies decisions in the sector. Therefore, broader factors other than sales growth may address the issue of tax planning in the consumer goods sector in Nigeria.

Due to the importance of financial structure in corporate tax behaviour, highly leverage firms give priority to risk management and financial stability over engaging in tax planning activities. Larger firms may engage more in tax planning than the smaller firms, though size of the firm is not the decisive factor with more influence on tax planning. Firms with larger board might be associated with slight increase in tax planning activities but this factor alone could not be significant in embarking on tax planning activities in the listed consumer goods firms in Nigeria.

Board independence is a key component of corporate governance but its function may be limited in this specific aspect of tax planning in the consumer goods sector of Nigeria. Though financial expertise for audit committee members is a legal requirement, it is not the key driver to tax planning strategies and implementation amidst the consumer goods firms in Nigeria. Although there is an indication that having a financially expert audit committee may contribute positively to tax planning efforts, this effect is not strong enough to be deemed significant. This is because other factors or variables not explored in the study might have a more substantial impact on tax planning decisions within these consumer goods firms.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are made:

(i) The study recommends that consumer goods firms should diversify their tax planning strategies. Instead of relying on profitability, they should explore other avenues such as tax credits, incentives, or restructuring their operations to optimize their tax positions. Firms in the consumer goods sector should ensure continuous growth in sales as the relationship is positive though insignificant.

(ii) Finance Officers of the firms should maintain prudent level of leverage that would minimize tax liability and diversify financing sources instead of solely depending on debt financing. Also, firms should conduct a thorough risk assessment to identify potential risks associated with leverage and tax planning. Understanding the interplay between financial leverage, tax planning, and business risks could inform strategic decision-making and help mitigate negative outcomes.

(iii) Firms should foster collaboration and communication between the board and management regarding tax planning initiatives, and encourage open dialogue and information sharing to ensure that the board is adequately informed about tax-related risks, opportunities, and strategies. They should also establish clear channels for reporting on tax matters and involve the board in key decision-making processes related to tax planning. Financial expertise within the audit committee should also include tax expertise, promote cross functional collaboration between finance, tax and legal department of the firms in order to enhance the effectiveness of the audit committee and ensure comprehensive approach to tax planning.

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ETERMINANTS OF AUDIT QUALITY OF LISTED FINANCIAL FIRMS IN NIGERIA

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Abstract
This study examined the determinants of audit quality in the context of Nigerian-listed financial firms. Using the ex-post facto research, the population for this study comprises all the listed financial firms, census sampling methods were adopted, and since the population was not too large, all the 59 financial firms were used for the purpose of this study as at 31st December 2023. Data was spooled from audited annual financial statements of the considered companies for 11 years from the 2013-2023 financial year. Correlation and regression analysis were carried out using STATA 17. The outcome of the study revealed that auditor industry specialization has a negative and statistically insignificant effect on audit quality, audit committee diligence has a negative and significant effect on audit quality, audit committee size has a significant and positive effect on audit quality and audit committee gender diversity has a significant and positive effect on audit quality of listed financial firms in Nigeria. The study recommended that emphasis and focus should be placed on the size of the audit committee to improve audit quality, in addition, the requirement of having an average-size-member audit committee is sound and empirically proven to aid audit quality.

Keywords: Audit Committee Characteristics, Audit Quality, Financial Services Firm Sector

INTRODUCTION
The global corporate scene has in the last few decades witnessed a series of corporate scandals involving erstwhile reputable business organizations such as those of HealthSouth, Enron and WorldCom in the United States, and Royal Ahold, Vivendi Universal and Parmalat in Europe. In addition, the Nigerian corporate scene is not spared with respect to cases of corporate scandals. There have been widely reported instances of corporate scandals such as those of Cadbury Nigeria Plc, Unilever Brothers Plc, African Petroleum Plc, Intercontinental Bank, Union Bank Plc, Oceanic Bank Plc and Afribank Plc to mention but a few. These incidences of corporate scandals have brought a big question mark on the quality of financial statements prepared and presented by the Management in these organizations on one hand, and the quality of audit exercise executed by the external auditors on the other hand (Ogbodo & Akabuogu, 2020).

Accounting has been frequently regarded as the language of business; it represents the language deployed by corporate management in reporting the organization's financial and economic activities to stakeholders, including shareholders, creditors, regulatory authorities, current and potential investors among others (Akinyomi et al., 2017). Therefore, the public has a set of expectations on the annual financial statements as put together by accountants and adjudged to reflect a true and fair view of the financial position of the organization by the external auditors. Generally, audit process is expected to be conducted in such a way that material misstatement, fraudulent practice, misjudgement, and inconsistencies should be discovered and corrected/reported, thereby confirming that the reports reveal fairness and truthfulness in the financial position of the business for the benefit of the stakeholders (Bakare, 2019; Olabisi et al., 2020). Where corporate scandal occurred, it is either the external auditor was unable to detect the existence of material misstatement, fraudulent practice, misjudgement, and inconsistencies, or a lack of the willpower to report such findings in the audit report (Madugba et al., 2021). This has caused a loss of confidence by stakeholders generally, and the investors on the validity of the opinion expressed by external auditors on the annual reports of corporate entities globally. The foregoing invariably questions the quality of audit reports produced by the external auditors.

To guarantee high quality audit, a mixture of external and internal concurrent elements needs to be considered. Previous studies have drawn attention to divergent components which influence audit quality. Among these identified components we have mechanisms of corporate governance (such as board size, board independence, board composition, etc.), audit firm tenure, audit firm size, and company size (Ismail et al., 2019; Kertarajasa et al., 2019; Patrick et al., 2017). Nevertheless, the results of these previous studies are not conclusive. For instance, while some of these studies reported the existence of significant link between each of the above variables and audit quality, other studies reported the existence of no significant association between each of the identified factors and audit quality. This inconsistent nature of the results of previous studies, therefore, necessitates further study on the subject matter. Thus, the current study seeks to examine the link between audit quality on one hand, and each of audit industry specialization, audit diligence, audit committee gender diversity, and audit committee size in the context of the Nigerian financial firms listed on the Nigeria Exchange Group (Stock Market).

Thus, the study aims to examine the determinant of audit quality of listed financial firms in Nigeria. The study hypothesized that audit attributes have no significant effect on audit quality of listed financial firms in Nigeria.

LITERATURE REVIEW

Concept of Audit Quality

Audit Committee Diligence

The diligent meeting of an audit committee indicates the commitment of members of the audit committee in carrying out their tasks and obligations in an organization. The Nigerian Corporate Governance Code (2018) claims board meetings are the central focus for conducting board business and effectively achieving strategic results. As a result, regular audit committee meetings would aid in uncovering any financial irregularities and resolving challenges that may arise during the reporting process (Mbobo & Umoren, 2016), and thus frequent audit committee meetings would aid in reducing the financial reporting lags. Prior research, such as

Karamanou and Vafeas (2005), confirms that meeting frequency contributes to committee diligence. It is significant since each member would need some avenue to communicate with one another. DeAngelo (1981) defines audit quality as the ability to detect and report material misrepresentation of financial statements. The auditor's ability to find this error depends on the auditor's technological capabilities, the procedures applied in the audit process, the number of samples taken, etc. While the conditions under which the auditor would report an error are a measure of the auditor's independence of the client being audited. Implementing the audit engagement and the likelihood of the auditor expressing the error is difficult for external observers to observe.

Therefore, an indicator is needed that reflects the quality of the audit. The proxy used to measure audit quality varies. DeAngelo (1981) proposed size of the auditors (auditor size) as a measure of audit quality, while Carey and Simnet (2006) proposed the possibility of the auditor stated in the company going concern issues that threatened bankruptcy, the number of abnormal working capital accruals, missing earnings as a measure of audit quality benchmarks. In measuring the quality of audit, the most used method is discretionary accruals. Discretionary accruals could be a measurement of the quality of audits because the higher the auditor's ability to find deviations (auditor competence of high-quality high audit) the lower the tendency of clients to conduct discretionary accruals. Lower value of discretionary accruals shows good quality of earnings.

Audit Committee Gender Diversity

The diversity in an audit committee is also an important characteristic. Different genders have different attitudes and ethical conduct in performing their duties. It has been found that females are more ethical in performing their duties than males (Bilic & Sustic, 2011). The presence of women on the board enhances the ability of the business to run healthily and a female presence is considered as a complement to the male directors. Additionally, audit committees that have mix of genders represented could perform more effectively than committees that have a single gender (Halpern, 2000). Although the evidence about the relationship between fraud and gender is very limited, it is suggested that in the management process, men are more likely to be overconfident than women. Thus, the tendency for men to commit fraud is greater than the same tendency in women (Schrand & Zechman, 2012). Moreover, the presence of female board members on the audit committee positively influences the number of meetings held and enhances the reporting quality of financial statements.

Audit Committee Size

The Blue-Ribbon Committee (BRC) report of 1999 released the usefulness of having an audit committee and recommended that an effective audit committee of listed companies should comprise at least three directors. This recommendation reflects the assumption that size is a very important attribute of an effective audit committee and could have a significant effect on the monitoring of earnings management (Pincus et al., 1989). Although the size of audit committee is affected mainly by the size of the company and its board of directors, if the audit committee size is too small, then an insufficient number of directors to serve the committee and thus decrease its monitoring effectiveness (Vafeas, 2005). This is so perhaps because small committee is not capable of fulfilling its duties efficiently as the given assignments is always increasing. Also, when a committee size is too large, the directors' performance may decline because of the coordination and process problems and hence highlight another reason for weak monitoring (Jensen, 1993; Vafeas, 2005). The perfect average of the audit committee size is between 3 and 4 members (Abbott et al., 2004; Xie et al., 2003).

Auditors Industry Specialization

Industry specialist auditors are auditors who have gained great training and experience concentrated in a specific industry. Solomon et al. (1999) discovered that industry specialist auditors have more accurate non-error frequency knowledge than non-industry specialists. Previous research has examined a great deal about the relationship between auditor specialization and audit quality. Solomon et al. (1999) conducted an experiment to find out the knowledge of the specialist auditors of health and financial industry clients. Knowledge is the knowledge of error information and non-error in the financial statements. Solomon et al. (1999) indicates that specialist auditors have more accurate knowledge of non-error information than errors in financial statements. Low (2004) found that the knowledge that auditor specialization has on the client industry could improve the ability of risk assessment and directly influence the quality of decisions in audit planning. Audit quality performed by auditor specializations is also better than non-specialist auditors because they are capable of detecting errors and irregularities, and this difference is more noticeable in the early years of engagement. Chi and Chin (2011) observed that auditor specialization affects audit quality, and the influence of individual level specialist auditors within the same firm is variable. Recently, research that uses surveys and interviews conducted by Sarwoko and Agoes (2014) on 163 public accountants in Indonesia found that specialized sector auditors have a significant impact on the implementation of audit procedures used to detect fraud, and it could improve the quality of audits.

Empirical Review

Audit industry specialization and audit quality

The study of Abbah and Sadah (2020) examined the consequences of quality audit engagement on firm value. The study ascertained that auditors with industry specialization enhance higher value of the studied banks, while audit firm size has no significant influence on the value of the banks with the adoption of correlational research design for 13 banks covering the period of six years from 2013-2018. The study stressed on the importance of specialization on the part of auditors as a contributory factor to audit quality thereby enhancing the value of banks under consideration.

Garcia-Blandón and Argilés-Bosch (2018) investigated the impact of the auditor industry specialization of individual auditors on audit quality. They used several proxies of both industry specialization and audit quality. They conducted the empirical analysis with a sample of Spanish listed companies for 2005-2013 research period. Their result has insignificant impact of partner's industry specialization on audit quality. This result seems rather sound as it holds across all measures of industry specialization used in the empirical study and it does not depend on the proxy of audit quality. Also, their result, which contradicts most of the available evidence, stresses the importance of the institutional context in the study of the partner's industry specialization-audit quality relationship and advocates the need for further research.

In Swedish companies, Zerni (2012) studied the effects of partner's industry specialization on audit quality as proxied by audit fees. He concluded that industry specialization is viewed by the users of financial statements as differentiation strategies involving different levels of audit quality and thus resulting in higher audit fees, audit committee diligence and audit quality. Goodwin and Wu (2014) for the Australian audit market showed that partner's industry specialization is highly significant and economically important. Like Zeini (2012), they used audit fees as the proxy of audit quality. Interestingly, the authors also found that auditor industry expertise fee premium is much more a partner-level than an office-level phenomenon.

Audit committee gender diversity and audit quality
Thiruvadi and huang (2011) explored whether gender diversity of audit committees has an impact on firm earnings management. They used a performance-adjusted discretionary accrual model to examine the association between gender variables and firm earnings management. Regression analysis was applied using 320 firms from the S&P Small Cap 600. They found consistent evidence to show that the presence of a female directors on the audit committee constrains earnings management by increasing negative (income-decreasing) discretionary accruals.

Ammer and Ahmad-Zaluki (2017) examined the impact of audit committee gender on the accuracy of management earnings forecasts disclosure in IPO prospectuses. The study sample comprised 190 Malaysian companies issuing IPOs that transformed into public companies during the period 2002-2012. Earnings forecasts accuracy (quality) is proxied by absolute forecast error and the study model is developed based on the frameworks of the signaling theory, the agency theory and the resource dependence theory. The findings show that an insignificantly positive relationship exists between audit committee gender and absolute forecast error, which indicated that more female directors in the audit committee could translate into more errors and less accuracy in earnings forecasts. The study opined that female directors introduce a set of specific features to the boardroom that serve to improve investors' protection and efficient monitoring of management.

Audit committee size and audit quality
Salawu et al. (2018) examined effects of audit committees on audit quality of listed consumer-goods companies in Nigeria over the period 2006-2016 using longitudinal research design. The population of the study is the 23 listed consumer-goods companies in the Nigerian Exchange Group (NGX) as at 31st December, 2016. The sample size is 15 after filtering eight companies listed outside the period of the study and without complete data set. The study uses secondary data from the published annual reports and accounts of sampled firms. Descriptive and inferential statistics were used for the study. The results revealed that audit committee size has insignificant positive effect on audit quality; audit committee head showed mixed results (insignificant positive effect when audit quality is measured by audit firm size and insignificant negative effect when audit quality is measured by audit tenure).

Change et al. (2021) examined audit committee characteristics on audit quality in Nigeria for 10 years spanning from 2009-2018. The study adopted an expo-facto research design, and the population covered all the 12 listed oil and gas sector firms out of which 10 firms were selected through a random sampling technique. The study used secondary data sourced from the published financial reports of the sampled firms. Through logistic regression, it was discovered that audit committee size exerted a positive significant effect on audit quality of firms in the oil and gas sector in Nigeria and that audit committee meeting revealed a positive but insignificant effect on audit quality of firms in the oil and gas sector in Nigeria.

The study of Ogbodo and Akabuogu (2018) examined the effect of audit quality on the performance of selected banks in Nigeria. The study considered 16 listed Deposit Money Banks (DMBs) in Nigeria for the period of 10 years from 2008-2017. Audit committee independence and audit committee size proxied audit quality, while the profit margin and return on equity proxied performance of the DMBs under review. The study discovered that audit committee independence has significant effect on return on equity, while audit committee size has significant effect on profit margin. The study still emphasized on the need to engage the services of auditors with high reputation with the aim of enhancing performance.

Audit committee diligence and audit quality

Asiriuwa (2018) examined audit committee attributes and audit quality with emphasis on the specific requirements of the 2011 SEC Code. The study applied the deductive approach via the ex-post facto research design and the Binary probit regression model in analysing the various hypotheses put forward in the study. Data used for the study was gathered for 150 firm-year observations from the annual reports of quoted companies on the floor of the NGX. Findings from the study revealed that audit committee size, frequency of meetings, number of expertise and overall effectiveness all have a positive relationship with audit quality. However, only size and overall effectiveness were significant in their relationship.

Change et al. (2021) examined audit committee characteristics on audit quality in Nigeria for 10 years spanning from 2009-2018. The study adopted an expo-facto research design, and the population covered all the 12 listed oil and gas sectors firms out of which 10 firms were selected through a random sampling technique. The study used secondary data sourced from the published financial reports of the sampled firms through logistic regression. It was discovered that audit committee size exerted a positive significant effect on audit quality of firms in the oil and gas sector in Nigeria and that audit committee meeting reported a positive but insignificant effect on audit quality of firms in the oil and gas sector in Nigeria.

Theoretical Framework

This study is theoretically underpinned by stakeholders' theory. As the name implies, stakeholder theory is an advanced development on the perception of stakeholders and its association with any business organization. This theory is believed to be propounded by Freeman (1984). It gives a contradictory view on the view of Friedman (1962) who affirmed that it is the responsibility of the corporation to make profit for the shareholders. Freeman (1984) asserted that managers must protect the rights of all the stakeholders of an organization. Comparing the two scholars' opinions, it could be agreed that there is a distinct separation between them. Freeman (1984) defined a stakeholder as any individual or group who could affect or is affected by the accomplishment of the organization's goals. In essence, the general idea behind stakeholders' theory is to redefine the organization. A lot of concepts before the establishment of this theory focused on the fact that the major aim of any organization is to maximize its shareholders' wealth, if they do not do anything illegal or not in line with standard requirements.

Theory of Inspired Confidence

It was propounded by Professor Limperg Theodore in the late 1920s and could also be referred to as the rational expectations' theory. According to the theory, auditors should organize and perform their duty in a manner that would not distort the expectation of various stakeholders

(Mawutor et al., 2019). The theory opined that a situation when the confidence of the society members has been thwarted as regards the effectiveness of audit quality and audit opinion, then audit is socially useless. The theory stressed society's need for reliable financial information in which effective audit techniques could provide through the auditors' responsibility of being expert for independent examination of financial information and produce independent and unbiased opinion thereafter. Therefore, auditors should strive to meet the information needs of the public. The theory also discoursed that demand for audit exercise occurs because of stakeholders' participation in the affairs of the business and, therefore, there might be divergence in the interest of management and other stakeholders. In order to give assurance to the confidence of stakeholders, audit is considered paramount (Saleh, 2011).

METHODOLOGY

The study employs a longitudinal research design. The population for the study is 59 quoted financial services firms which have available and accessible audited annual reports that cover the study period (2013-2023). There was no sampling done given the small population of the sector. Secondary data was used for this study. The data was retrieved from corporate annual reports of the sampled listed financial firms on the NGX for the period 2013-2023 financial years. The study utilizes only annual reports because they are readily available, accessible, and provide a greater potential for comparability of results. The determinants of audit quality were analyzed using panel regression. The study made use of panel data regression as the technique for estimating the econometric models specified in this study. Panel data regression is chosen because of the multidimensional nature of the data which has both time or periodic dimension and cross-sectional dimension. This resulted in 560 panel observations for each variable of the study.

Model Specification

This model examines the relationship between determinants of audit quality of financial firm in Nigeria. The model builds on the studies of Iqbal and Zaib (2017), Muttakin et al. (2015) and Haji (2018). The model is specified as follows:

AUQ AUIS AUCD AUCS ACGD FIRMSIZE

$$AUQit=\beta_0+\beta_1 AUIS_{it}+\beta_2 AUCD_{it}+\beta_3 AUCS_{it}+\beta_4 ACGD_{it}+\beta_5 FIRMSIZE_{it}+eit \ldots\ldots\ldots\ldots\ldots\ldots \text{(i)}$$

Where: *AUQ=Audit quality; AUIS=Auditor industry specialization; AUCD=Audit committee diligence, AUCS=Audit committee size, ACGD=Audit committee gender diversity, Firmsize= Natural log of total assets (as control variable);* β_0 = is the intercept, β_1-β_3 = are the parameters estimate or coefficients in equation, μ = error.

Table 1: Variables Measurement

S/N	Variables	Definition	Type	Measurement	Construct validity source
1.	*AUQ*	Audit Quality	Dependent	¼ Discretionary accruals, measured using modified jones model	Ilaboya and Ohiokha (2013), Dang (2004), Kanagaretnam et al. (2010), and Zagonov (2011)
2.	*AUIS*	*Auditor industry specialization*	Independent	Degree of industry focus, according to the sum of their total client audit fees for each particular industry	Li et al. (2012)
3.	*AUCD*	*Audit committee diligence*		Log of number of meetings (Frequency)	Hassan and Yaacob (2019)
4.	*AUCS*	*Audit committee size*		Measure proportion of female directors on the board.	Shuaibu (2018); Ghazaleh and Garkaz (2015).
5.	*ACGD*	*Audit committee gender diversity*		Percentage of female directors in the audit committee	Shuaibu (2018); Ghazaleh and Garkaz (2015).
6.	*Firmsize*	*Firm Size*		Firm size is measured using the Natural log of total assets.	Onu (2018)

Source: Researchers' compilation (2023)

RESULT AND DISCUSSION

The data collected from the various financial statements was presented and analyzed. This section presents the descriptive statistics, correlation matrix, regression diagnostic tests and regression results.

Descriptive Statistics

This sub-section of the study contains the description of the properties of the variables ranging from the mean of each variable, minimum, maximum and standard deviation. The summary of the descriptive statistics of the variables is as presented in Table 2.

Table 2: Descriptive Statistics

```
. summarize auq auis aucs acgd aucd firmsize
```

Variable	Obs	Mean	Std. Dev.	Min	Max
auq	560	.2303272	.3460763	-.812479	1
auis	560	.7392857	.4394168	0	1
aucs	560	5.725	.8370341	1	9
acgd	559	1.09839	1.149714	0	7
aucd	560	3.196865	1.523306	.008919	9
firmsize	560	7.596178	1.143203	4.19385	9.8001

Source: Output from STATA 17

The result of the descriptive statistics in Table 2 indicated that the measure of audit quality, which is the inverse of absolute discretionary accruals of financial firms has an average value of 0.2303272 with standard deviation of 0.3460763 and minimum and maximum values of -0.812479 and 1 respectively. The extent of absolute value of discretionary accruals in the sampled firms has a mean of 23% with standard deviation of approximately 35% from the average. The values of minimum and maximum which is far from each other indicates a high deviation between companies. The firms tend to record a reasonably high financial reporting quality in some years than in others.

The descriptive statistics in Table 2 also showed that on average, the auditor industry specialization during the period of the study was approximately 74%, while deviation from the mean value of 44% was observed for the period. This revealed that on average 74% of the firms' used auditors that were industry specialist in auditing financial firms. The value of the standard deviation which depicts 44% means that most of the firms used industry specialist auditors in their audit engagements. The auditor industry specialization shows a minimum of 0 and maximum of 1.

The descriptive statistics also indicated that the sampled firms have an average of audit committee size of 5.725 with standard deviation of 0.8370341. This means that the average number of audit committee members in their audit assignment is about 6 with a standard deviation of 8%. The minimum and the maximum as shown by the table is 1 and 9 respectively.

The table illustrated that the average audit gender diversity of the sampled financial firm during the period of the study is 1.098039 with a standard deviation of 1.149714 This implies the number female member of the audit committee of financial firms in Nigeria vary a little given that the standard deviation is just a little away from the mean. The standard deviation suggests that the data is distributed around the mean. The minimum and maximum values 0 and 7 respectively. Finally, Audit committee diligence, has a mean value of 3.196865 and a corresponding standard deviation of 1.523306. This shows that meetings hold at average of 3.196865 (three) times revealing the frequency of meetings by audit committee members and the value of the standard deviation supports this assertion given its closeness to the means without significant deviation. The minimum and maximum number of audit committee diligence is 0.008919 and 9 respectively.

Correlation Matrix

A correlation matrix table below shows correlation coefficients between variables. Each cell in the table shows the level of association between two variables. this summarized data, as an input into a more advanced analysis, and diagnostic. The table below shows the correlation between the dependent variable and each of the independent variables.

Table 3: Correlation Matrix

```
. correlate auq auis aucs acgd aucd firmsize
(obs=559)
```

	auq	auis	aucs	acgd	aucd	firmsize
auq	1.0000					
auis	0.1615	1.0000				
aucs	-0.0270	0.0476	1.0000			
acgd	-0.1038	-0.0164	0.0208	1.0000		
aucd	-0.7915	-0.1840	0.0741	0.1176	1.0000	
firmsize	-0.1465	-0.1177	-0.1220	-0.1136	0.1451	1.0000

Source: Output from STATA 17.

Table 3 shows the correlation between the dependent variable, auq, and the independent variables, auis, aucs, acgd, aucd and firmsize on one hand, and among the independent variables themselves on the other hand. Generally, high correlation is expected between dependent and independent variables while low correlation is expected among the independent variables. According to Gujarati (2004), a correlation coefficient between two independent variables of 0.80 is considered excessive and thus certain measures are required. This points to the absence of possible multicollinearity, though the value inflation factor (VIF) and tolerance value (TV) tests are still required to confirm the assumption. The table reveals a positive correlation between the dependent variable of audit quality and the explanatory variables of, industry specialization, while the remaining independent variables of audit committee size, audit committee diligence, and audit committee gender diversity and the control variable firm size showed a negative correlation.

Regression Diagnostics

The following post diagnostic regression tests are carried out to find out whether data used for analysis are reliable.

Test for Multicollinearity

Non-existence of multicollinearity is a key assumption of linear regression analysis. Multicollinearity occurs when the explanatory variables are not independent of each other. Multicollinearity is examined using tolerance and variance inflation factor (VIF) values. The result of Multicollinearity test is shown in Table 4.

Table 4: Tolerance and VIF Values

Variable	VIF	1/VIF
auis	1.02	0.981343
aucs	1.03	0.972523
acgd	1.01	0.992476
aucd	1.02	0.984954
firm size	1.03	0.973678
Mean VIF	1.02	

Source: STATA 17 Output.

Based on the evidence presented in Table 4 it could be concluded that there is no adverse multicollinearity problem. This is because the VIF values for all the variables are less than 10 and the tolerance values for all the variables are greater than 0.10 (rule of thumb).

Test for Heteroscedasticity

Heteroscedasticity arises when the error terms along the regression are not equal. Heteroscedasticity was tested using Breusch Pagan's Test. Based on the results, it could be concluded that there is no problem of heteroscedasticity as the chi square is 0.15, with a corresponding probability of 0.2401 which is insignificant, implying that there is absence of heteroscedasticity.

Hausman Speciation Test

In panel data analysis (the analysis of data over time), the Hausman Test could help to choose which between fixed effects model or random effects model is appropriate for interpretation. The null hypothesis is that the preferred model is random effects. The alternate hypothesis is that the preferred model is fixed effects. Essentially, the test looks to see if there is a correlation between the unique errors and the regressors in the model. The null hypothesis is that there is no correlation between the two. Therefore, because of the homogeneity of data used in this study, which assumes that fixed effects and random effects models are similar, Hausman test is performed to determine which of the two models is more efficient.

	Coefficients (b) Fixed	(B) Random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
auis	-.0118487	.0027655	-.0146143	.
aucs	.0237313	.0182357	.0054956	.
acgd	-.0051008	-.0064166	.0013158	.
aucd	-.0460036	-.0906	.0445964	.0039225
firmsize	.0182783	.0116122	.0066661	.

```
                 b = consistent under Ho and Ha; obtained from xtreg
  B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test:  Ho:  difference in coefficients not systematic

              chi2(5) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =      114.52
            Prob>chi2 =      0.0000
            (V_b-V_B is not positive definite)
```

The result of the Hausman Test reveals that the value of chi2 is 114.52 and the prob>chi 0.000 The significant value as reported by the probability of chi2 indicates that the Hausman Test is in favour of fixed effect model. Furthermore, to meet the condition that one or more equations have to be satisfied exactly by the chosen values of the variables and further check between the stated model and random effect model which is more appropriate, the Breusch and Pagan Lagrangian Multiplier Test for random effect was conducted. The result revealed that the chi2 value is 17.89 with prob>chi2 = 0.0000. The result indicated that the best model to be interpreted is the random effect model.

Regression Result

Table 5: Regression Model

```
. xtreg auq auis aucs acgd aucd firmsize, fe

Fixed-effects (within) regression               Number of obs      =       559
Group variable: id                              Number of groups   =        55

R-sq:  within  = 0.0698                         Obs per group: min =         9
       between = 0.6827                                        avg =      10.2
       overall = 0.5258                                        max =        11

                                                F(5,499)           =      7.49
corr(u_i, Xb)  = 0.6647                         Prob > F           =    0.0000
```

auq	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
auis	-.0118487	.0217229	-0.55	0.586	-.0545284	.0308309
aucs	.0237313	.0090893	2.61	0.009	.0058733	.0415894
acgd	-.0051008	.0078511	-0.65	0.516	-.0205261	.0103246
aucd	-.0460036	.0093533	-4.92	0.000	-.0643803	-.027627
firmsize	.0182783	.0076158	2.40	0.017	.0033152	.0332414
_cons	.117163	.0891936	1.31	0.190	-.0580783	.2924043
sigma_u	.26478048					
sigma_e	.13378889					
rho	.79661586	(fraction of variance due to u_i)				

```
F test that all u_i=0:     F(54, 499) =    16.48            Prob > F = 0.0000
```

The R-square value showed the level at which the explanatory variables explain the dependent variable. The regression result in Table 5 reveals that the R-square is between 68%. This means that the predictor variable as determinant of audit quality in the study explained audit quality to the tune of 68%. The value of probability >f = 0.0000 this shows significance level less than 5% at 0.00%, indicating that the model is fit. This serves as substantial evidence to conclude that the determinants of audit quality used are suitable for the study.

Discussion of Findings

The regression result on Table 5 also shows that auditor industry specialization has an insignificant negative effect on audit of quality of financial firms in Nigeria, from the coefficient of -.0118487 with t-value of -0.55 and a p-value of 0.586 which is statistically insignificant at 5% level of significance. This result suggests that an increase in use of industry specialist auditors decreases the level of audit quality by 1.18% while holding aucs, augd and aucd constant. Based on this, the study accepts the null hypothesis which states that, auditor industry specialization has no significant effect on the audit quality of financial firms in Nigeria. Basically, industry specialist auditors are auditors who have gained great training and experience concentrated in a specific industry. Solomon (1999) finds that industry specialist auditors have more accurate non-error frequency knowledge than non-industry specialists. Owhoso et al. (2002) suggest that industry specialists could more effectively detect seeded errors in staff work papers during the audit review process. This is consistent with the agency theory. However, this study is inconsistent with the findings of Balsam et al. (2003), Dunn and Mayhew (2004), Stanley and DeZoort (2007), Romanus et al. (2008), Li-Jen (2015), Sair (2018) and Burgen (2015).

The result of the study as shown on Table 5 indicates that audit committee size has a coefficient of 0.0237313, a t-value of 2.61 and a p-value of 0.009. This suggests that audit committee size has a positive significant effect on audit quality of quoted financial firm in Nigeria. A unit increase in the size of the audit committee size would lead to a corresponding significant increase in audit quality by 2.4%. Based on this, the study rejects the null hypothesis which states that audit committee size has no significant effect on audit quality of quoted financial firms in Nigeria.

The result of the study as shown on Table 5 indicates that audit committee gender diversity has a coefficient of -0.0051008, a t-value of -0.65 and a p-value of 0.516. This suggests that audit committee gender diversity has a negative and insignificant effect on the audit quality of listed financial services firms in Nigeria. A unit increase in the female audit committee would lead to a corresponding insignificant decrease in audit quality by 0.5%. Based on this, the study accepts the null hypothesis which states that audit committee gender diversity has no significant effect on audit quality of quoted financial firms in Nigeria.

The result also shows that audit committee diligence has a t-value of -4.92, a coefficient of -.0460036 and a probability-value of 0.000 which is significant at 5% level of significance. This means that audit committee diligence has a significant negative relationship with audit quality of financial firms in Nigeria. This further explained that a percentage increase in diligence which is audit committee meetings will in turn decrease the quality audit of financial firms by 4.6 % while holding other independent variables constant.

CONCLUSIONS AND RECOMMENDATIONS

This study examined determinants of audit quality in Nigeria with a special reference to financial firms. Specifically, the study assessed the effect of auditor industry specialization, audit committee size, audit committee gender diversity and audit committee diligence on audit quality of financial firms in Nigeria. Theoretically underpinned by the stakeholder theory. Ex-post facto research design was adopted. From the findings of the study, it is concluded that audit committee has a statistically significant effect on audit quality in Nigeria. In relation to the specific variables, it was established that the size of audit committee could cause a significant increase in audit quality and that increase in the number of meetings of the audit committee has no potency to significantly improve audit quality in financial firms in Nigeria. Thus, it was recommended that emphasis and focus should be placed on the size of the audit committee to improve audit quality; modalities surrounding the meetings of the committee should be revisited; and adequate supervision and monitoring should be ensured in every meeting of the committee members.

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EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study investigated the effect of Corporate Social Responsibility (CSR) on financial performance of listed Deposit Money Banks (DMBs) in Nigeria. Specifically, the study examined the effect of environmental management system, and community development initiatives on return on assets (ROA). Archival research design was adopted. Data for the study was obtained from the annual reports and accounts of listed DMBs in Nigeria for the ten years period from 2013–2022. The study used a census sample of 12 DMBs listed on the Nigerian Exchange Group (NGX). Data for the study was analyzed using econometric techniques including multiple regressions, fixed effects and random effects. Some diagnostic tests such as normality, multicollinearity, and heteroskedasticity were conducted to examine the behaviour of the data. The results revealed that environmental management system and community development initiatives have a negative and insignificant effect on the ROA of the sampled banks. Based on the findings the study concluded that CSR has an insignificant effect on the financial performance of listed DMBs in Nigeria. Based on the findings and conclusion, the study recommended amongst others that Nigerian banks should continue to implement their CSR efforts because they contribute to long-term sustainability, enhance reputation, and align with stakeholders' expectations.

Key Words: Corporate Social Responsibility, Financial Performance, Deposit Money Banks.

INTRODUCTION

In Nigeria, Deposit Money Banks (DMBs) play a vital role in the activities of the financial system and the economy, thereby, enhancing their performance which is seen as not only desirable but also essential. Among the various characteristics of corporate boards that affect bank performance, board size and composition have received substantial research interest (Aernan, et al., 2023). The financial performance of banks is linked with risk and performance parameters (Abubakar et al., 2019; Afolabi et al., 2020; Cheng et al., 2020; Soyemi et al., 2014), and DMBs are in business to make a profit and maximize their shareholders' wealth. Nevertheless, in recent decades, society has changed so much that profit is no longer seen as the main aim for operating a business, with various interest groups calling on companies to pay extra attention to the human, environmental and other social activities that concern them.

CSR participation may lead to improved financial outcomes, such as increased profitability, enhanced stock market performance, and reduced risk, sometimes to the barest minimum. In contrast, others have it that CSR activities may result to increased cost or expenses to the firm, potentially resulting to low profitability due to high expenses associated with sustainability initiatives and regulatory compliance (Dewi & Monalisa, 2016).

The main objective of CSR is to give back to society, participate in corporate philanthropic and activist causes, and give positive social impacts. Business organizations are increasingly moving towards CSR, building an outstanding brand, and carrying out extensive marketing. Common CSR practices include environmental sustainability, human capital development and enhancement, community welfare, and ethical conduct (Abdallah et al., 2020; Borges et al., 2018). Similarly, the firm reputation implies 'how the public perceives the firm's performance, prompted by CSR implementation from all four perspectives: environment, society, employees, and customers. Firm reputation is the image of a firm in the eyes of consumers, which affects their interaction with the firms and the level of firm marketing. Thus, the improved reputation of the firm enhances sustainable performance of the business (Herrera & de lasHeras-Rosas, 2020).

People would choose to do business with organizations are concerned about the general public's social and environmental concerns and regulatory bodies. The 'triple bottom line' concept, as fabricated by John Elkington, founder of the British consultancy 'Sustainability', has been used to determine business' long-term viability. Society, the environment, and profits are the three components of this concept. A profitable, sustainable business displays social responsibility to the community while protecting or safeguarding environmental resources (Pislaru et al., 2019).

The relationship between CSR and financial performance has been a topic of considerable research and debate. On one hand, proponents argue that strong or robust CSR initiatives and transparent disclosures could result to improved financial performance by attracting socially conscious investors, reducing operational expenses, and intensifying brand loyalty. On the other hand, skeptics contend that CSR activities may attract additional costs and divert resources away from core business activities, potentially resulting to poor financial performance.

Specifically, financial institutions, including banks, have embraced CSR practices as a means of addressing their commitment to social welfare, building integrity, enhancing their image and reputation, retaining employees, and improving customer relationships (Mobin et al., 2017). CSR activities have now spread through all aspects of banking operations, considering its importance (Ashraf et al., 2017).
Practically, for decades, researchers have attempted to reveal the mutual dependency of CSR and firm performance. A significant report of the CSR literature showed that corporate philanthropy influences market return and a lot of studies have established that CSR could leverage a firm's profitability and market returns (Blasi et al., 2018; Suteja et al., 2016).

Empirically, research on this topic has produced diverse as well as, conflicting findings. Some studies have established and reported positive associations between CSR and financial performance metrics, such as profitability and stock market performance. Others have found no significant correlation between CSR and financial performance, hence, a need for further exploration and deeper understanding of the interplay between CSR and financial performance. While numerous studies have investigated the significance of CSR in the banking sector, certain aspects related to CSR frameworks, models, and success factors remain unclear. While some studies have examined the impact of CSR on bank profitability and market returns in various countries, there is a need for further research, specifically, on DMBs. This suggests a need for more research that explores the distinctive dynamics of CSR and financial performance within the Nigerian banking sector which is a seeming gap that this research seeks to fill. Hence, it is on this ground that this study was conducted to assess the effect of CSR on the financial performance of listed DMBs in Nigeria.

The broad objective of this study was to investigate the effect of CSR on the financial performance of listed DMBs in Nigeria. The specific objectives are to:

i. Assess the extent to which environmental management system affect the return on assets listed DMBs in Nigeria.
ii. Examine the effect of community development initiatives on the return on assets of listed DMBs in Nigeria.

In line with the research objectives, the two following null hypotheses are formulated to provide presumable answers to the objectives which is intended to guide the study

H_{01}: There is no significant relationship between environmental management practices and the return on assets of listed DMBs in Nigeria.

H_{02}: Community development initiatives does not have a significant impact on the return on assets of listed DMBs in Nigeria.

LITERATURE REVIEW
Conceptual Underpinning
Concept of Corporate Social Responsibility
According to Kamal (2021), CSR involves minimizing negative impacts on stakeholders while maximizing positive effects, emphasizing environmental stewardship, upholding human rights, and practicing good corporate governance. Bardos et al. (2020) define CSR as a global business issue which submits that 'doing good' positively influences stakeholder groups, protects firms from negative publicity, positively shapes customer identifications (Einwiller et al., 2019), and indirectly enhances firm value. To Oladipupo and Okudo (2019), CSR is a form of corporate self-regulation integrated into business models. CSR functions as a self-regulatory mechanism by which a corporation ensures its active compliance with the spirit of the law and ethical standards. Its aim is to increase the long-term profits or survival of a firm through constructing positive public relations and high ethical standards, in order to reduce the business and legal risk, and build shareholder trust. Nzekwe et al. (2021) also offered the explaination of CSR similar to Oladipupo and Okudo (2019).

Davis (2010) asserts that socially responsible business decisions could be justified by a long, complicated process of reasoning as offering an opportunity to bring the company long-run economic gain, thus repaying it for its responsible outlook (Carroll et al., 2018). Johnson and Greening (2019) identified specific interest groups with a variety of different needs, stating that “social responsibility in business is the pursuit of socioeconomic goals through the elaboration of social norms in prescribed business roles”. Furthermore, Wartick and Cochran (2015) submit that a social contract is a binding element between business behaviour and society’s objectives. When the surrounding societal conditions change, the specifics of the social contract may also change.

Concept of Environmental Management

Social responsibility encourages companies to balance social responsibilities and environmental responsibilities with profit. Consequently, profit maximization or a continuous market-share increase should be the main objective for companies (Badulescu et al., 2018). In recent years, environmental problems like climate change have gained considerable attention, and business organizations are increasingly being demanded to take responsibility for addressing society's serious challenges (Ren et al., 2020). Global environmental concerns and stakeholder pressures demand organizations to deploy green processes (Meuer et al., 2020; Yu & Ramanathan, 2015) and pay attention to social issues (Mani et al., 2016). In modern societies business organizations that convert natural resources into products of wealth are at the centre of discourses on unsustainable practices (Imbrogiano, 2021).

Concept of Community Development

Corporate Social Responsibility emphasizes community participation by business enterprises. The United Nations defines “community development” as an effort of individuals in a community conducted in such a way to help solve community problems with a minimum help from external organisations. External organisations include government and non-government organisations, and corporations of various types and sizes such as small and medium enterprises (SMEs) and multinational corporations (MNCs) (Ahmad et al., 2020). According to Sekulic and Pavlovic (2018), the socially responsible behaviour of a company or corporation reflects the adoption and implementation of discretionary business practices and investments that promote the welfare of the community and which enhance environmental protection. Companies must execute creative and environmentally friendly projects if they want to establish a sustained competitive advantage (Tuan & Ha, 2023).

In a study by Nhavira (2019) the author investigated the CSR practices within a service-based educational institution. The analysis examined the institution's involvement in education, community development, and environmental sustainability projects. The study conducted by Zishiri and Chindondondo (2023) examined the correlation between CSR and customer loyalty within financial services- oriented organisations. Their findings revealed that involving customers in CSR initiatives could cultivate a shared sense of ownership and ultimately enhance customer loyalty Community development is part of the CSR activities engaged by firms or organizations which involve those activities, strategies and how firms conduct their business in a way that is ethical, society friendly and beneficial to communities in terms of development (Roja & Sherina, 2015).

Financial performance

Financial performance refers to the act of performing financial activity. In broader sense, financial performance refers to the degree to which financial objectives are being or has been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. These results are reflected in the firm's return on investment, return on assets, value added, etc (Lyndsey, 2019; Okudo et al., 2022). The level of performance of a business over a specified period of time is expressed in terms of overall profits and losses during that time. Evaluating the financial performance of a business allows decision-makers to judge the results of business strategies and activities in objective monetary terms. Financial performance is a subjective measure of how well a firm could use assets from its primary mode of business to generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and could be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Omabu et al., 2021).

Measurement of Financial Performance

Measurement of financial performance is needed to abet in achieving a master plan through financial and non-financial measurement instruments. The outcome of the measurements could be used as information to estimate or evaluate how to work and aid in future plan, that is through comparing the plans made with the outcome of achievement and improving how to work to avoid mistakes, measuring financial performance would influence decisions that would be made. The benefits of measuring financial performance include assessing company financial strengths and weaknesses; measuring company effectiveness and efficiency; measuring progress and achievement, and predicting failure and financial distress (Hasibuan, 2023).

Financial Performance Indicators

Financial performance can be measured by accounting based indicators and market based indicators. This study made use of accounting based indicators. Return on Assets (ROA) and Return On Equity (ROE) are the mostly used accounting based indicators in research.

ROA is the capability of a business unit to obtain a certain number of assets owned by the business unit, used in calculating the amount of investment carried out through the use of its activities (Murtiningsih & Tohirin, 2023). It shows the level of efficacy by the company that maintains the so-called investment level. ROA is used to show how far the capabilities of the assets owned by the firm could bring benefits. This ratio is the most important ratio among the ratios of profitability. On the other hand, ROE measures company's ability to generate profit after deducting tax using own capital. Investors who buy shares will like to know the level of profitability that will be due to shareholders. ROE can measure the value of management's performance and success in maximizing the rate of return for shareholders (Hanafi and Halim; 2012: 177). Kurniawan (2013) asserts that the higher the Return on Equity, the more effective and efficient the management of the company or in other words, the company's performance is appreciative, thus influencing investor to pick interest in investing in companies with high supply and high stock returns. This is supported by research conducted by Juwita (2013) showing that the Return On Equity variable established a positive and significant effect on stock returns, and is in contrast to Firdausi and Riduwan (2017) research which shows that the Return On Equity variable has no significant correlation and negative for stock returns. In this study, ROA was used as the indicator of financial performance

Conceptual framework of variables

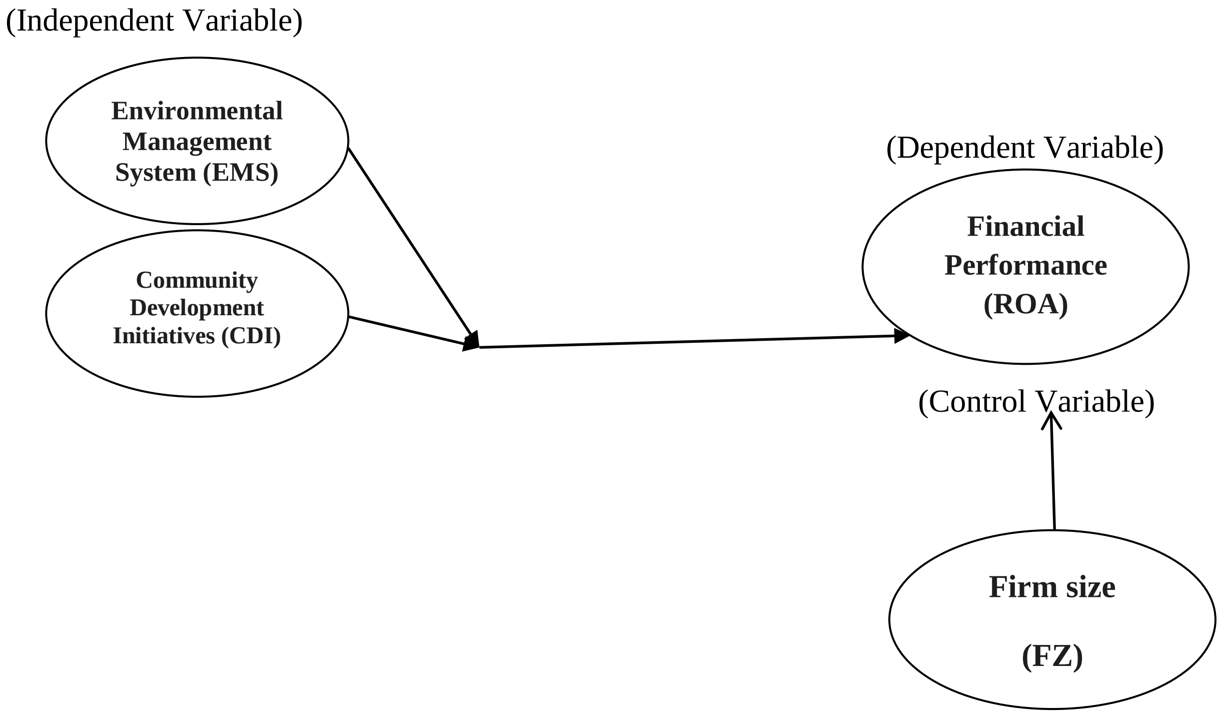

Figure 1: The conceptual model of CSR with firm financial performance

Theoretical Framework

For the purpose of this study the stakeholders' theory was considered as the underpinning theory.

Stakeholders' Theory

This theory was developed by R. Edward Freeman in the 1980s. Stakeholders' theory considers the firm's stakeholders as a contextual factor that moderates the interplay between CSR and financial performance (Rivera et al., 2017; Wang et al., 2016). The theory submits that organizations have a moral and ethical obligation not only to shareholders but also to all stakeholders who are affected by the organization's actions, including environment, communities, customers, suppliers, and the employees. The theory asserts that by addressing the needs and concerns of these diverse stakeholders, organizations could enhance their long-term sustainability and, consequently, their financial performance. In this study, Stakeholders' theory serves as the basis for understanding the motivations attached to CSR practices and how they could have impact on financial performance

There is a growing body of research that has indeed adopted the use of stakeholders' theory when examining CSR. Yang and Basile (2021) investigated the role of external stakeholder plays in CSR communication by depicting upon stakeholders' theory. They hypothesized that the involvement of external stakeholders such as non-profit organizations increases CSR, communication, productivity and firm performance. This is because external stakeholders reduce the perception that firms are advertising false CSR information for self-interest (Rim & Kim, 2016). Kim (2019) asked participants to evaluate the corporate reputation and corporate trust that have engaged in CSR activities. It shows that CSR activities could positively affect consumers' evaluation of the firm. This is because CSR activities make consumers perceive that organizations are supporting stakeholders and these signs are interpreted by consumers as positive image signals, thereby improving corporate reputation.

Empirical Studies

Umeano et al. (2022) investigated the effect of CSR on the financial performance of companies listed on the Nigerian Exchange group (NGX). It addresses the problem of whether engaging in CSR activities help companies improve their financial performance. Employing an ex-post facto research design, adopting a quantitative approach that rests on a positivist philosophical world view, it applies panel data analysis on CSR expenditure, ROA, ROE, and Tobin's Q, covering 124 companies from 2011 to 2020. Empirical results demonstrate that CSR had no significant influence on financial performance of listed companies when performance was measured by ROA and Tobin's Q, but had a significant positive effect when measured by ROE. This implies that engaging in CSR activities may not always lead to improvement in financial performance.

Gherghina and Vintilă (2016) explored the impact of CSR policies on firm value of listed companies in Romania. The study aimed at providing evidence on the links between CSR and firm value on the example of listed companies in Romania. To achieve the study objective, the study collected secondary data from annual reports considering sub index on the rights, health, safety, security, and development. Multivariate Regression Models was adopted in analysing the data, the study found a positive impact of the CSR global index and CSR sub-indices, except for the CSR sub index related to environmental protection on firm value.

Lee and Choi (2021) investigated the impact of internal and external CSR activities on firm value. The aim is to determine whether or not internal and external CSR enhances firm value. The study focused on CSR activities related to business partners in supply chains. Using an index from the Korea Commission for Corporate Partnership, which point out whether a firm shares its profits with business partner companies, the findings shows that firm value increases as this backward CSR increase. Also, firms that only engaged in external CSR have lower firm value than non-CSR firms. After controlling for internal CSR, the outcome indicated that firms involved in both internal and external CSR have higher value.

Ashraf et al. (2017) looked at Asian banks' ROA and ROE. In this study, it was reported that this factor had a positive and statistically significant effect on bank profitability. The study's results corroborated the link between CSR and bank profitability. Using Panel data and multiple linear regression analysis.

Shuaibu (2017) investigated the impact of CSR dimensions on the CFP of DMBs in developing economies, Turkey and Nigeria in particular. In agreement with the stakeholders' theory, the results show that CSR positively affects CFP in Nigeria. However, there does not appear to be any correlation between CSR and CFP in Turkey. CSR has positive impact on CFP in Nigeria and no significant relationship between CSR and CFP in Turkey. Olanipekun (2019) study of CSR and OP in a sample of Nigerian financial and manufacturing institutions used a cross-sectional survey design. It was established that CSR has a notable impact on both financial and market success. The CSR practices of a few selected Nigerian banks and manufacturing companies are also remarkably similar.

METHODOLOGY

The population of this study consists of all the 12 DMBs listed on the Nigerian Exchange Group as at 31st December, 2022. In view of the availability of data, this study uses the census sampling technique to consider the entire 12 banks as the sample of the study.

Furthermore, in this study, secondary instrument for data collection was the annual financial statements of the thirteen (12) listed Deposit Money Banks (DMBs) on the NGX for the period 2013 to 2022. These financial statements have to some extend provided the necessary numerical data on financial performance and CSR-related metrics, serving as the primary source of information for the study. The financial statements include various financial indicators such as profitability ratios, liquidity ratios, and other relevant financial data, which are essential for assessing financial performance. Additionally, CSR-related metrics and practices reported in the financial statements are used to measure CSR engagement.

The variables and their measurements are depicted and explained below:

Table 1: ***Variable Measurement***

S/N	Variable	Measurement	Source
Dependent Variable			
1	ROA	Return on Assets (%) Profit before Tax / Total Assets	Hevi et al. (2018), Certo et al. (2024), Dede et al. (2019), Dewi and Monolisa (2016)
Independent Variables			
2	EMS	Environmental Management System cost	Xun et al. (2023), Joan et al. (2023)
3	CDI	Community Development Initiatives cost	Yodit et al. (2023), Christakopoulou et al. (2001)
Control Variable			
4	(FSIZE)	Natural Log of total assets	Babalola (2012 and Usman and Amran (2015)

Sources: *Compiled by the Author from Various Literature*

The model for this study is specified as follows:

$$ROA_{it} = \beta o+\beta_1 EMS_{it}+\beta_2 CDI_{it} +\beta_3 fSIZE_{it} +e_{it}$$

Where:
ROA = Return on Assets (representing the financial performance)
EMS = the Environmental Management System
CDI = the Community Development Initiatives
FSIZE = Firm Size
e = error term

The model includes firm-level control variable. It is likely that different firms have different level of CSR activities.

β_0 is the intercept term.
β_1-β_3 are the coefficients associated with each independent variable.
e is the error term, representing unobserved factors affecting ROA.

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics table provides an overview of the variables used in the analysis. These variables include Return on Assets (ROA) as a measure of financial performance, Environmental Management System (EMS), Community Development Initiatives (CDI), and Firm Size (FSIZE). Table 4.1 presents the descriptive statistics for these variables, providing insights into their central tendencies and dispersion.

Table 2: Descriptive Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
ROA (ratio)	120	0.0396	0.0733	-0.0910	0.5403
EMS (₦)	120	22819.1	22412.16	360	97000
CDI (₦)	120	24170.85	60516.97	259	600700
FSIZE (log)	120	21.2771	21.4164	16.0835	23.0841

Source: **Stata 14 output**

Table 2 reveals that ROA has a mean value of 0.0396 which indicates that, on average, the banks in the study generated a return of approximately 3.96% on their assets. However, the standard deviation of 0.0733 suggests a considerable variation in ROA across the banks. The minimum value of -0.0910 indicates that some banks experienced negative returns, while the maximum value of 0.5403 reveals that certain banks achieved a remarkable return of up to 54.03% on their assets. This wide range highlights the diverse financial performance among the banks in the study.

Likewise, EMS has a mean value of 22,819.1 and the standard deviation of 22,412.16 suggesting that on average, the banks in the study spent ₦22,819,100 on environmental management systems, with some banks spending significantly more or less than the average. The banks' environmental management initiatives varied significantly. Having a minimum of 360 and Maximum of 97000 implies that certain banks spent as low as ₦360,000 while others spent as high as ₦97,000,000 towards environmental management practices. These variations could be attributed to factors such as bank size, corporate culture, and regulatory requirements.

Moreso, CDI has a mean value of 24170.85 which indicates that on average deposit money banks spent ₦24,170,850 on community development initiatives while the standard deviation of 60516.97 suggest a wide range of investments in this area across the banks. The result reveals that the minimum and maximum of CDI is 259 and 600700 respectively. The minimum value of ₦259,000 suggests that some banks had minimal investments in this area, while the maximum value of ₦600,700,000 indicates that certain banks dedicated significant resources towards such initiatives. This variation could be influenced by factors such as bank size, corporate social responsibility policies, and the perceived importance of community development. Regarding the control variables, the average value of firm size is 21.2771 with a standard deviation of 21.4164. Therefore, there exists a high variation among the value of firm size across the sample deposit money banks in Nigeria ranging from a minimum of 16.0835 to a maximum of 23.0841.

Correlation Analysis

The degree of correlation between each explanatory variable (EMS, CDI, and FSIZE) and the dependent variable (ROA) is examined in this section. In order to test for multicollinearity among the explanatory factors, it also displays the strength of the link between the independent variables themselves. The correlation coefficients for each sample used in the entire study are shown in Table 3.

Table 3: Correlation Matrix

	ROA	EMS	CDI	FSIZE
ROA	1.0000			
EMS	-0.3393	1.0000		
CDI	-0.2742	0.6887	1.0000	
FSIZE	-0.1136	-0.4011	-0.3745	1.0000

Source: Stata 14 output

The correlation coefficient between ROA and EMS is -0.3393, indicating a moderate negative correlation. This suggests that as banks invest more in environmental management systems (higher EMS1 cost), their Return on Assets (ROA) tends to decrease. The negative correlation could be attributed to the potential additional costs associated with implementing and maintaining environmental management practices, which may initially impact profitability. However, it is essential to note that this correlation does not imply causation, and other factors may influence this relationship. Also, the correlation coefficient between ROA and CDI is -0.2742, indicating a weak negative correlation. This suggests that higher investments in community development initiatives (higher CDI cost) are associated with lower Return on Assets (ROA) for banks. The negative correlation could be due to the additional expenses incurred in community development programs, which may reduce short-term profitability. However, it is essential to consider that community development initiatives could potentially enhance a bank's reputation and customer loyalty, which could positively impact long-term financial performance.

Table 4: Shapiro-Wilk test

Variables	W	V	Z	P-Values	N
ROA	0.719	32.615	7.900	0.000	120
EMS	0.962	4.086	3.351	0.000	120
CDI	0.979	3.107	2.001	0.022	120

Source: Stata 14 output

The Shapiro-Wilk test of normality shows that all the variables (ROA, EMS, CDI,) of the study are not normally distributed except firm size. This is for the fact that the p-values (0.000, 0.000, 0.022,) for the coefficient of the test indicates significant (0.158) which is normally distributed. The abnormality of the data does not affect the statistical inferences of the result as supported by Gausian (2019) and Shoa (2022).

Regression Analysis

The result of random effect model from the regression analysis is presented in Table 4.4. The regression examines the relationship between CSR and financial performance of listed deposit money banks in Nigeria.

Table 5: Regression Results

Variables	Coefficient	Z	P>|z|
Constants	0.6177	1.75	0.080
EMS	-0.0003	-0.30	0.767
CDI	-0.0000	-0.84	0.401
FS	-0.0639	-1.67	0.094
Overall R^2		0.5438	
Wald Chi2 (7)		2330.48	0.0000

Source: Stata 14 output

The random effects model shows an overall R^2 value of 0.5438. The R^2, or the coefficient of determination, represents the proportion of the variance in the dependent variable ROA that is explained by the independent variables in the regression model. In this case, the R-squared value of 0.5438 indicates that 54.38% of the variance in ROA could be explained by the independent variables (EMS, CDI, and FSIZE). This suggests a moderate level of explanatory power, meaning that while other factors (accounting for 45.62%) may influence ROA, the variables included in this model collectively account for a significant portion of the ROA variability.

The Wald chi-square test for the random effects model has a chi-square value of 2330.48 with 7 degrees of freedom. The probability value associated with this test is 0.0000, which is less than the conventional threshold of 0.05. This indicates that there is statistically significant evidence to suggest that the set of independent variables collectively have a significant effect on ROA.

The REM result in Table 5 revealed that EMS has a negative coefficient of -0.0003 and a p-value of 0.767. This implies that environmental management system has a negative and insignificant effect on ROA. This suggests that a one percent increase in environmental management cost would result to 0.03% decrease in financial performance of the studied banks in Nigeria. This suggests that the implementation of environmental management systems does not have a significant impact on a firm's financial performance as measured by ROA. While environmental initiatives may incur additional costs, they do not seem to substantially affect profitability.

Similarly, the result in Table 5 revealed that CDI, has a negative coefficient of -0.0000 and p-value of 0.401 . This implies that community development initiatives has insignificant negative effect on ROA. This finding suggests that a one percent increase in community development cost would result in a decrease in ROA by 0.0000. The negative coefficient implies that increased spending on community development initiatives might have a slight negative impact on ROA, potentially due to the associated costs. However, the insignificant p-value suggests that this relationship is not strong enough to draw a definitive conclusion.

Hypotheses Testing

Hypotheses were tested based on the regression results to determine the significance of the relationships between the variables. The null hypotheses were rejected or accepted based on the p-values obtained from the regression analysis.

The first hypothesis (H_{01}) which stated that there is no significant relationship between environmental management practices and the financial performance of listed DMBs in Nigeria has a p-value of 0.767 which is greater than the significance level of 5%. Therefore, the study fails to reject the null hypothesis (H_{01}), suggesting that there is no significant relationship between environmental management practices and the financial performance of listed DMBs in Nigeria.

The second hypothesis (H_{02}) stated that community development initiatives does not have a significant impact on the financial performance of listed DMBs in Nigeria. The regression result revealed that the p-value for CDI is 0.401, which is greater than 0.05. As a result, the study fails to reject the null hypothesis (H_{02}), indicating that community development initiatives does not have a significant impact on the financial performance of listed DMBs in Nigeria.

Table 7: Summary of Hypothesis Testing

Hypothesis	Statement	P-value	Decision
H_{01}	Environmental management practices do not have a significant relationship with the financial performance of listed DMBs in Nigeria.	0.767	Fail to reject
H_{02}	Community development initiatives do not have a significant impact on the financial performance of listed DMBs in Nigeria.	0.401	Fail to reject

Source: Stata 14 output

Discussion of findings

Based on the result from the regression analysis, the study found the following:

i. There is no significant relationship between environmental management practices and the financial performance of listed deposit money banks (DMBs) in Nigeria.
ii. Similarly, the results indicate that community development initiatives do not have a significant impact on the financial performance of listed DMBs in Nigeria.

This finding aligns with the study by Okafor et al. (2022) and Alam et al. (2019), which found that environmental management practices did not significantly impact firm financial performance in the banking sector. However, the study contradicts the study by Iyiegbuniwe et al. (2020) who found a positive association between environmental management practices and financial performance of DMBs in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The implementation of environmental management practices does not have a significant impact on the financial performance of Nigerian banks. This could be due to the nature of the banking industry, where environmental impacts may be perceived as relatively low, or the costs associated with such practices may outweigh the potential benefits in the short term. Also, the engagement in community development initiatives does not significantly influence the financial performance of Nigerian banks. This could be because such initiatives are perceived as philanthropic efforts that do not directly contribute to the core business operations or revenue generation of banks.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are made:

i. While environmental management practices may not have an immediate impact on financial performance, Nigerian banks should continue to implement such practices as part of their corporate social responsibility efforts. These practices could contribute to long-term sustainability, enhance reputation, and align with stakeholder expectations.

ii. Nigerian banks should continue to engage in community development initiatives as part of their broader corporate social responsibility strategy. While these initiatives may not directly impact financial performance, they could contribute to building stronger relationships with local communities, enhancing the bank's reputation, and fostering long-term sustainability.

iii. Nigerian banks should carefully evaluate the costs and benefits of implementing improved employee relations practices. While such practices may contribute to organizational performance in the long run, banks should consider strategies to mitigate the short-term costs associated with these initiatives, such as phased implementation or exploring cost-effective alternatives.

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EFFECT OF BOARD DIVERSITY ON SUSTAINABILITY DISCLOSURE OF LISTED NON-FINANCIAL COMPANIES IN NIGERIA

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Abstract
This study examined the effect of board diversity on sustainability disclosure of listed non-financial companies in Nigeria. Board diversity is proxied using board foreign nationality, board professional educational background, board independence, board gender and CEO duality, while environmental, social and governance disclosure is the proxy for sustainability disclosure. A sample of 41 companies was used and ex post facto research design was adopted. The data was analysed using content analysis and panel multiple regression. A two-point filter technique was used to determine the sample size within the study period 2013–2022. The data used for this study was obtained from secondary sources. This is due to the fact that it is a quantitative study based on positivism paradigm and the core of the data needed for analysis could be adequately and conveniently extracted from the audited financial reports of the selected non-financial companies within the period of study. The study revealed that professional educational background has significant positive effect on sustainability disclosure, suggesting that greater number of board members with backgrounds in ICAN, ANAN, accounting, or finance lead to higher levels of sustainability disclosure. Also, the research revealed that having more independent directors on the board significantly boosts sustainability disclosure, indicating that listed non-financial companies in Nigeria would disclose more about their sustainability practices as the number of independent directors increases. The study recommends that companies prioritize the recruitment of board members who have professional qualifications from ICAN (Institute of Chartered Accountants of Nigeria), ANAN (Association of National Accountants of Nigeria), or have substantial experience in accounting and finance. This would likely enhance the board's capacity for effective sustainability reporting.

Keywords: Sustainability Disclosure, Board Diversity, Foreign Nationality, Board Independence, Board Gender

INTRODUCTION

In recent years, the concept of sustainability has gained significant attention in the business world (Ismail & Latiff, 2019). Companies are increasingly expected to understand and address their environmental, social, and governance impacts to ensure long-term success and mitigate risks. The demands from corporate organization have gone beyond the maximization of the shareholder's wealth to the need of other stakeholders of the firms which includes the employee, community and the environment (Oluwatoyin et al., 2021).

Sustainability disclosure represents the report on activities of corporations that have direct impact on society, its environment, and economic performance. Sustainability disclosure allows businesses to reveal their policies, objectives and results in all Economic, Governance, Social, Ethical, and Environmental issues, thereby ensuring the attainment of long-term financial goals while also minimizing negative social, governance and environmental impacts (Rezaee, 2017). The board is one of the corporate governance mechanisms that helps to protect the interests of business owners and other stakeholders. Their duty of overseeing and monitoring the reporting process makes them very important to the success and survival of a firm (Aifuwa & Embele, 2019). On sustainability disclosure, a diverse board is far better in overseeing and monitoring the reporting of non-financial information of a firm (Michelon & Parbonetti, 2012). With their unique attributes, they improve the firm’s strategic decision quality, and identify and fulfil stakeholders needs (Michelon & Parbonetti, 2012). Diversity in the boardroom comes in different dimensions (nationality, gender, education level, independence, CEO duality).

The purpose of this study is to examine the effect of board diversity on sustainability disclosure of listed non-financial companies in Nigeria. The study intends to provide valuable insights to policymakers, regulators, and companies seeking to enhance their sustainability performance. Additionally, investors could benefit from this research by making informed decisions when considering sustainability criteria as part of their investment strategies. According to Ismail and Latiff (2019), non-financial firms are considered better when it comes to sustainability reporting for several reasons some of which include Stakeholder Expectations: Non-financial firms often have stakeholders who prioritize sustainability concerns, such as customers, employees, and communities. Meeting these expectations is essential for their reputation and long-term success; Risk Management: Non-financial firms are often more exposed to environmental and social risks in their operations. Effective sustainability reporting helps them identify and manage these risks, ensuring long-term resilience (Ismail & Latiff, 2019).

The researcher derives motivation to explore the "Effect of Board Diversity on Sustainability Disclosure of Listed Non-Financial Companies in Nigeria" due to its profound implications on corporate governance and societal impact. Examining how diverse boards influence sustainability disclosure is a captivating endeavour as it delves into the intersection of business practices, social responsibility, and governance. The potential to shed light on how inclusive leadership could drive positive environmental, social, and governance outcomes in the Nigerian context adds significance to this exploration. Understanding these dynamics could contribute to fostering more sustainable and responsible business practices, aligning with global efforts towards corporate accountability and ethical stewardship.

Statement of the Problem

Governance issues within non-financial companies in Nigeria often revolve around corruption, transparency deficiencies, weak corporate governance structures, and regulatory compliance shortcomings (Ismail & Latiff, 2019). All these mentioned could impede effective decision-making, diminish trust among stakeholders, and obstruct sustainable business practices. Social concerns encompass insufficient workplace safety measures, violations of labour rights, unequal employment opportunities, and limited community engagement, leading to employee discontent, tarnished corporate reputations, and increased social inequalities. Environmental challenges involve inadequate waste management, air and water pollution, deforestation, and insufficient adherence to environmental regulations, posing significant risks to ecosystems, public health, and the overall sustainability of businesses.

Previous research has shown that diverse boards bring a variety of perspectives, experiences, and expertise, enhancing decision-making processes and positively impacting on firms. There seem to be mixed findings as a result of some researchers, presenting a positive or significant impact and others negative or insignificant impact on the nexus between nationality and gender diversity in the boardroom and sustainability disclosure (Fodio et al., 2021; Githaiga & Kosgei, 2023; Gold et al., 2021; Gulzar et al., 2019; Ismail & Latiff, 2019; Obi & Ifeoma, 2021; Oluwatoyin et al., 2021). There is a dearth in literature on the nexus between educational background diversity, independence diversity in the boardroom and sustainability disclosure (Fodio et al., 2021; Gold et al., 2021; Khan & Senturk, 2019; Okere et al., 2021; Selven et al., 2021). Also, most research of this kind were carried out abroad covering either a specific sector or more and mostly on specific board diversity or specific sustainability reporting. Therefore, it is vital to contribute towards further study by examining the effect of the combination of both gender, foreign nationality, independence, CEO duality and professional educational background on environmental, social and governance disclosure of listed non-financial companies in Nigeria.

Objectives of the Study

The specific objectives are to:

i. Investigate the effect of board foreign nationality on the sustainability disclosure of listed non-financial services companies in Nigeria.
ii. Ascertain the influence of board professional educational background on the sustainability disclosure of listed non-financial services companies in Nigeria.
iii. Assess the influence of board independence on the sustainability disclosure of listed non-financial services companies in Nigeria.
iv. Determine the effect of board gender on the sustainability disclosure of listed non-financial services companies in Nigeria.
v. Ascertain the effect of chief executive officer (CEO) duality on the sustainability disclosure of listed non-financial services companies in Nigeria.

Research Hypotheses

To answer the research questions, five null hypotheses were designed as follows:

H_{01}: Board foreign nationality has no significant effect on the sustainability disclosure of listed non-financial companies in Nigeria.

H_{02}: Board member professional educational background has no significant effect on the sustainability disclosure of listed non-financial companies in Nigeria.

H_{03}: Board independence has no significant effect on the sustainability disclosure of listed non-financial companies in Nigeria.

H_{04}: Board Member gender has no significant effect on the sustainability disclosure of listed non-financial companies in Nigeria.

H_{05}: Chief executive officer (CEO) duality has no significant effect on the sustainability disclosure of listed non-financial companies in Nigeria.

LITERATURE REVIEW

Sustainability Disclosure in Nigeria

The Companies and Allied Matters Act of 2020 is the guiding law for companies in Nigeria. It regulates how companies are conducted and the statutory reports published by companies. However, the Act focuses mainly on financial reporting. No provision was made for sustainability reporting in the Act. In trying to improve environmental disclosure by companies, the Federal Government formulated several environmental laws through the Ministry of Environment and Natural Resources. According to Owolabi et al. (2017), examples of such laws are Federal Environmental Protection Agency Act of 1988; The National Environmental Protection (Effluent Limitation) Regulation; National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Waste) Regulation; National Environmental Protection (Management of Solid and Hazardous Waste) Regulation; Environmental Impact Assessment Act of 1992; and Harmful Waste Act of 1988. These laws aimed at restricting the release of a toxic substance into the environment (Adediran & Alade, 2013).

These Acts mainly established the standards which industries and facilities generating waste must meet; requiring organizations to develop contingency plans for handling unusual and accidental discharge and developing strategies for waste reduction; as well as install facilities capable of reducing or eliminating pollution arising from their production activities. The laws also established the maximum limits of effluent parameter discharge allowed into the air, streams, rivers, drains, and ground.

In the absence of any sustainability code, Nigeria adopted ISO 26000 in 2013, which is the NIS: ISO 26000. The ISO 26000 is a standard on social responsibility launched by the International Organization for Standardization in 2010. It is aimed at giving guidance to organizations on how to make their operations sustainable. It encourages organisations to be ethical and transparent in their dealings, thereby enabling them to contribute to the welfare of the society in which they exist. It requires organizations to conform to global best practices while they take into account the social, environment, laws, culture, as well as the political and economic environment in which they find themselves (International Organization for Standardization, 2010). One of the purposes for its adoption in Nigeria was for ensuring that charity and philanthropic activities of many corporate organizations are well documented in their reporting in line with global sustainability reporting standards. Despite this adoption, sustainability reporting in Nigeria was still unregulated and voluntary (Aondoakaa & Orluchukwu, 2015), and many corporate organisations do not present their report to reflect their suitability impact on society.

Environmental, Social and Governance (ESG) Disclosure

ESG is a set of criteria and factors used to assess a company's performance and impact in the areas of environmental sustainability, social responsibility, and corporate governance. ESG has become a fundamental component of sustainability reporting and is used to evaluate a company's non-financial performance. ESG disclosure are often overlapped with various concepts or terms such as sustainability and triple bottom line, and are regarded as the three pillars of sustainability (Staub-Bisnang, 2012). ESG disclosure, therefore, refers to additional financial material information about the challenges and performance of a company. It delivers additional relevant information, allowing more distinguished investment judgements by enabling investors to better assess risks and opportunities (Bassen & Kovacs, 2020).

Board Independence

An independent director is one who the board affirmatively determines has no material relationship with the company either directly or as a partner, shareholder, or officer of an organization that has a relationship with the company (Onyeozili et al., 2022). Board independence is the state in which all or a majority of the members of a board of directors do not have a relationship with the company except as directors. For example, they may not be relatives of the company's founders, key players or major employees.

Board Gender

The Unified Code of Corporate Governance (CUBG, 2006) promotes the involvement of women on the Board of Directors as a boost not only to the ethics, policies, and CSR but also to make it more efficient (Castilla-Polo et al., 2018). Gender composition often increases a firm’s value because it allows it to better appeal to clients, understand their needs, and how those needs could be met (Liao et al., 2015). It has been proven that women on corporate boards could make good and better contributions by forming coalitions, preparing for, and participating in essential decisions, captivating management positions, and being perceptible (Amran et al., 2014).

Board Foreign Nationality

Foreign nationality reflects the presence of foreign directors of different nationalities in the boardroom. Piekkari et al. (2015) asserted that foreign directors are deeply devoted to the firm’s transparency, accountability and reputation in the competitive market. In line with this, Zaid et al. (2020) echoed that nationality diversity is one of the modern drivers of corporate sustainability disclosure in the present-day business world. A board with a high representation of foreign directors from different nationalities brings a diverse idea and perspective to the boardroom (Ferrero-Ferrero et al., 2015).

Board Professional Educational Background

Barroso-Castro et al. (2017) documented that professional educational background of the board is a valuable resource for strategic decision-making such as decision on CSR disclosure. Heterogeneous professional educational background indicates diverseness in individual mentality, intellect, cognitive ability and attitude, which results in an improvement in quality of CSR disclosure. Educational background diversity derives knowledge and improves board members’ ability to generate and share new insights (Barroso-Castro et al., 2017) and enhances the strategic decision-making process (Clark & Maggitti, 2012).

Chief Executive Officer (CEO) Duality

CEO duality is when a company’s CEO serves as both its President and Chairman of the board. This practice allows the CEO to exercise significant executive power in a more unified manner, which is beneficial for firms that need to make timely decisions about critical business transactions. Furthermore, because the same person holds the two most powerful positions in the company, the person may be able to use his influence to improve the company’s performance while bridging the gap between management and the board through information disclosure. As a result, according to Jizi et al. (2014), CEO duality promotes corporate social responsibility (CSR).

Theoretical Review

Stakeholders' Theory

The stakeholders' theory, which emphasizes that a company should consider the interests of a wide range of stakeholders beyond just shareholders, has several proponents over the years. One of the notable contributors to this theory is R. Edward Freeman. Freeman played a significant role in promoting stakeholder theory. The traditional definition of a stakeholder is any group or individual who could affect or is affected by the achievement of the organization's objectives (Fontaine et al., 2006). The general idea of the stakeholder concept is a redefinition of the organization. In general, the concept is about what the organization should be and how it should be conceptualized. Popa et al. (2009) maintains that stakeholders' theory is based on the premise that the stronger the company's relationships are with other interest parties, the easier it would be to meet its business objectives.

Stakeholders' theory contributes to the corporate sustainability concept by bringing supplementary business arguments as to why companies should work toward sustainable development. Stakeholders' theory is relevant to this study because it emphasizes the importance of considering the interests and perspectives of various stakeholders in organizational decision-making. In the context of board diversity and sustainability reporting, stakeholders include not only shareholders but also employees, customers, communities, and other groups affected by or influencing the company's actions.

Empirical Review

Githaiga and Kosgei (2023) investigate the influence of board characteristics on sustainability reporting among listed firms in East Africa. The study uses a sample of 79 listed firms drawn from East African securities exchanges for the period of 2011 to 2020. Sustainability reporting is measured using Global Reporting Initiative. The results reveal that board gender diversity, board financial expertise and board independence are positively and significantly associated with sustainability reporting. Conversely, board size has a negative and significant effect on sustainability reporting.

Bugaje et al. (2022) investigate the relationship between corporate board size and board composition and corporate social responsibility disclosure with moderating effects of firm financial performance in the Nigerian listed non-financial companies. The population consists of 235 quoted companies in the financial sector and non-financial sector listed on the Nigerian Exchange Group (NGX). The sample data used in the study comprises 62 companies in listed non–financial companies in Nigeria and for the period of five years (2015-2019). The data are examined by panel regression models. The study found that board size and board composition have a positive relationship with CSR disclosure in the Nigerian listed non-financial firms.

Yahaya (2021) examined effect of board attributes on environmental disclosure quality of quoted industrial goods companies in Nigeria. The study adopts ex post facto research design relying on secondary data collected from the population of 13 industrial goods companies quoted on the NGX for the period 2010-2019. The whole companies were used as sample size.

The findings of the study reveal that for board attributes, only board size has a statistically significant and positive relationship with the extent of environmental disclosure.

Obi and Ifeoma (2021) investigate the impact of board demographics on sustainability reporting of listed non-financial firms in Nigeria. A sample of 75 quoted non-financial firms from Nigeria was used for the period of 10 years spanning 2011 to 2020. Using ex-post facto and cross-sectional research design, results revealed that gender diversity has negative and significant effect on sustainability reporting. The findings also revealed that nationality has a positive but insignificant effect on sustainability reporting.

METHODOLOGY

The study adopts ex-post factor research design because secondary data was used. The design was selected because it is suitable for studying events that have already taken place. The researcher makes use of content analysis for data collection. The decision to use content analysis is to enable the researcher to extract both qualitative and quantitative information specified in the annual reports of the selected companies. The population of the study consists of 106 listed non-financial companies on the NGX as at 31st December, 2023. In selecting the sample size, a two-point filter was used to eliminate firms that are not suitable for the study in line with Abu et al. (2018). The criteria are as follows: Firstly, the sampled firm must be listed on the NGX before 31st December, 2023 and published full audited annual reports throughout the study period to produce complete data required for the study. Secondly, a company must not have experienced technical suspension as a result of noncompliance with laid down regulations (Selven et al., 2021). These criteria led to the elimination of 65 firms, leaving the study with 41 non-financial companies. The techniques which were used for data analysis were content analysis and multiple regressions. Multiple regression analysis is most advantageous to the study because it is employed to determine the effect of more than one independent variable on the dependent variable. Descriptive statistics was used to show the characteristics of the data collected.

Model Specification

The individual models are presented below in line with Alkabas (2016) with slight modifications.

$SD_{it} = \beta_0 + \beta_1 BFN_{it} + \beta_2 BPE_{it} + \beta_3 BI_{it} + \beta_4 BG_{it} + \beta_5 CEO_{it} + \beta_6 FS_{it} + \beta_7 LEV_{it} + \varepsilon_{it}$

Where:

SD = Sustainability disclosure (Environmental, Social and Governance)

BFN = Board foreign nationality

BPE = Board professional educational background

BI = Board Independence

BG = Board gender

CEO = Chief Executive Officer (CEO) Duality

FS = Firm size

LEV = Leverage

β_0 = Intercept (constant)

i = cross-sectional time

t = time series

ε = Error term

β_1- β_7 = Coefficients

The variables of the study are measured as indicated in Table 1.

Table 1: Variable measurements

Description	Measurement	Sources
Dependent variable		
Environmental, social and governance	Dichotomous index; 1 if there is a disclosure, else, 0 if otherwise	Benjamin et al. (2017)
Independent variables		
Board gender	Number of Female Directors divided by total Directors on the Board of the company	Braz and Lopes (2018)
Board foreign nationality	Number of foreign directors sitting on the board divided by total number of directors	Anazonwu et al. (2018)
Board professional educational background	This is measured by the proportion of directors with Accounting/Finance, ICAN/ANAN to total number of directors on the board	Lewis et al. (2014)
Board independence	This is measured by the proportion of independent non-executive directors to the total number of board directors on the board of the company	Shahab and Ye (2018)
CEO Duality	Dichotomous index; 1 if the CEO serves as both its president and chairman of the board, else, 0	Abdullah and ku Ismail, (2017)
Control variables		
Firm size	Log of total assets	Inua and Emeni (2019)
Leverage	Measured by total debt divided by total equity.	Barnea and Rubin (2010)

Source: Compiled by researcher (2024)

RESULTS AND DISCUSSION

The results of the various analyses performaned in the study are presented in this section.

Descriptive statistics

Table 2 shows that the mean of sustainability disclosure is 65.5% with standard deviation of 16.7%. The minimum value is 16.3% with a maximum value of 90.7%. The mean indicates that listed non-financial companies in Nigeria have fairly uniform pattern of making sustainability disclosure. The standard deviation shows that there is insignificant difference in sustainability disclosure of the sampled companies during the period of the study since the standard deviation is less than the mean. The minimum disclosure of 16.3% is an indication that some companies did not cover much of the disclosure. The maximum disclosure implies that sustainability disclosure in listed non-financial companies in Nigeria is high at 90.7%.

Table 2: Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Minimum	Maximum
SD	410	0.655	0.167	0.163	0.907
BFN	410	0.217	0.223	0	0.947
BPE	410	0.182	0.095	0.06	0.5
BI	410	0.094	0.141	0	0.6
BG	410	0.151	0.124	0	0.571
CEO	410	0.032	0.175	0	1
LEV	410	2.651	8.527	-22.743	89.679
FS	410	7.534	0.747	5.784	9.425

Source: Computed by the researcher using STATA

The mean of board foreign nationality is approximately 22%. This means that about 22% of board members are having a foreign nationality while 78% are from Nigeria. Professional educational background of board of directors has a mean of 18%. This means that 18% of the board members have professional education background by either being members of professional accounting bodies such as ICAN, ANAN or those with qualification in accounting and finance. Board independence has a mean of 0.094 with a minimum value of 0 and maximum value of 0.6 independent directors. The standard deviation is 0.141 which indicates that independent board members are few in the sampled companies and there is a high variation in board independence under the period of study. The mean of board gender diversity is approximately 15%. This means that about 15% of board members are female while 85% are male directors. The table shows that, CEO duality has a mean of 0.032 with a minimum value of 0 and maximum value of 1. The standard deviation is 0.175 which indicates that CEO who serves as both the President and Chairman of the board are few in the sampled companies and there is a high variation in CEO duality under the period of study.

Furthermore, leverage has a mean of 2.651 with a minimum value of -22.743 and maximum of 89.679. The standard deviation of 8.527 implies high variation in leverage. Finally, firm size has a mean of 7.534 with a minimum value of 5.784, maximum of 9.425 and standard deviation of 0.747.

Correlation Analysis

Table 3: Correlation matrix

Variables	SD	BFN	BPE	BI	BG	CEO	LEV	FS
SD	1.0000							
BFN	-0.0153	1.0000						
BPE	0.0951	-0.0154	1.0000					
BI	0.1754	0.1460	0.0198	1.0000				
BG	0.0059	0.0655	0.1161	0.2221	1.0000			
CE0	-0.1019	-0.1639	0.0869	0.1544	0.1035	1.0000		
LEV	-0.0682	-0.0014	-0.0052	-0.0987	-0.1185	-0.0307	1.0000	
FS	0.0232	0.4349	0.1578	0.1922	0.2964	-0.0137	-0.0364	1.0000

Source: Computed by the researcher using STATA.

From the correlation table it could be seen that board professional educational background, board Independence, board gender and firm size have positive correlation with ESG disclosure with correlation coefficient of 0.0951, 0.1754, 0.0059 and 0.0232 respectively. This means that board professional educational background, board Independence, board gender and firm size move towards the same direction with sustainability disclosure. However, board foreign nationality, CEO duality and leverage have negative relationship with ESG disclosure with correlation coefficients of -0.0153, -0.1019 and -0.0682 respectively. This suggests that board foreign nationality, CEO duality and leverage negatively relates with sustainability disclosure.

Table 4: Hausman specification test

Chi^2	1.68
Probability	0.9754

Source: Computed by the researcher using STATA

The study model was subjected to Hausman specification test in order to select a more consistent estimator between fixed effect and random effect. The result on the table above on the Hausman test shows that the random effect is most appropriate over the fixed effect at probability value of 0.9754 which is greater than 0.05 level of significance.

Table 5: Breusch and Pagan Lagrangian multiplier test for random effects

Chi2	Prob>chi2
0.00	1.0000

Source: Computed by the researcher using STATA

The result of the Breusch and Pagan Lagrangian multiplier test for random effects shows that the ordinary least square is more appropriate over the random effect with chi2 of 0.00 and probability value of 1.0000.

Table 6: Robust pooled OLS Regression analysis

SD	Coefficient	Robust Std. Error	t	Probability
BFN	-0.050	0.043	-1.18	0.238
BPE	0.187	0.088	2.12	0.035
BI	0.246	0.062	3.97	0.000
BG	-0.054	0.077	-0.70	0.484
CEO	-0.144	0.045	-3.24	0.001
LEV	-0.001	0.000	-2.20	0.028
FS	0.000	0.013	0.06	0.952
Constant	0.618	0.087	7.15	0.000
Observations	410			
R^2:				
Overall	0.0671			
F Stat	4.13			
Prob > chi2	0.0000			

Source: Computed by the researcher using STATA

Table 6 shows that board foreign nationality has a negative and insignificant effect on sustainability disclosure of listed non-financial companies in Nigeria. This means that the presence of foreign members on the board of listed non-financial companies in Nigeria does not improve the sustainability disclosure of the companies. The result indicates that this relationship has statistical influence on sustainability as such, one unit increase in the number of foreign directors on the board would result to 5% decrease in sustainability disclosure. The study finding is in line with Gold et al. (2021) and Obi and Ifeoma (2021) who found no evidence of the nexus between foreign nationality and sustainability reporting. However, the finding contradicts Khan and Sentuk (2019) who documented that foreign directors are one of the valuables having the potentials to promote sustainability disclosure.

The study found that board professional educational background has positive and significant effect on sustainability disclosure among listed non-financial companies in Nigeria. This means that there is a positive relationship between board members that have professional education background by either being members of professional accounting bodies such as ICAN, ANAN or those with qualification in accounting and finance of listed non-financial companies in Nigeria and sustainability disclosure. This implies that an increase in board professional educational background would lead to an increase in sustainability disclosure of listed non-financial companies in Nigeria. This is in agreement with the findings of Githaiga and Kosgei (2023) and Issa and Hamman (2021) who revealed that educational background has a significant effect on sustainability reporting. On the other hand, the finding contradicts Khan and Sentuk (2019) and Gold et al. (2021) who found no evidence of the nexus between educational background and sustainability reporting.

The study found that board independence has positive and significant effect on sustainability disclosure of listed non-financial companies in Nigeria. This means that the presence of independent members on the board of non-financial companies in Nigeria has a positive association with sustainability disclosure of the companies. The result further shows that this relationship has statistical influence on sustainability as such, one unit increase in the number of independent directors on the board would result to 24.6% increase in sustainability disclosure. The study finding is in line with Githaiga and Kosgei (2023), Ozordi et al. (2020) and Isa and Hamman (2021) who documented that board independence has a positive and significant effect on sustainability disclosure.

Furthermore, the study found that board gender has a negative and insignificant effect on sustainability disclosure of listed non-financial companies in Nigeria. This means that the presence of female members on the board of non-financial companies in Nigeria has a negative association with sustainability disclosure of the companies. The result further shows that this relationship has statistical influence on sustainability as such, one unit increase in the number of female directors on the board would result to 5% decrease in sustainability disclosure. The finding is in line with Ismail and Latiff (2019) and Fodio et al. (2021) which reveal that female directors have negative and insignificant effect on sustainability disclosure, while the finding contradicts Githaiga and Kosgei (2023), Obi and Ifeoma (2021), and Isa and Hamman (2021) which states that board gender has positive and significant effect on sustainability disclosure.

Also, the study found that CEO duality has a negative but significant effect on sustainability disclosure of listed non-financial companies in Nigeria. This means that the presence of CEO serving as both the President and Chairman of the board of listed non-financial companies in Nigeria has a negative association with sustainability disclosure of the companies. The result further shows that this relationship has statistical influence on sustainability as such, one unit increase in the number of CEO serving as both the President and Chairman of the board would result to 14% decrease in sustainability disclosure. The finding is in line with Onuorah et al. (2018) which states that CEO duality has negative influence on sustainability disclosure, but it contradicts the findings of Corvino et al. (2020) which states that CEO duality has no significant effect on sustainability disclosure.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that the inclusion of foreign members, female directors and CEO who hold dual position on the board has a slightly negative effect on sustainability disclosure, implying that an increase in any of them is associated with reduced sustainability disclosure.

Recommendations

The study recommends that companies prioritize the recruitment of board members who have professional qualifications from ICAN (Institute of Chartered Accountants of Nigeria), ANAN (Association of National Accountants of Nigeria), or have substantial experience in accounting and finance. This would likely enhance the board's capacity for effective sustainability reporting. Also, companies should consider increasing the proportion of independent directors on their boards. This could involve revising board selection criteria to attract independent directors with expertise in sustainability and corporate governance.

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DETERMINANTS OF TAX COMPLIANCE OF SMALL AND MEDIUM SCALE ENTERPRISES (SMES) IN NASARAWA STATE

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Abstract
This study examined the determinants of tax compliance among small and medium scale Enterprises (SMEs) in Nasarawa State. The study employed survey research design, and the population is limited to only 504 active SMEs in Karu Local Government, which comprises 1,008 respondents. However, a sample size of 286 respondents were selected using Taro Yamane (1967) formula. A simple random sampling technique was employed in selecting the SMEs used for the study. A close-ended questionnaire with a Cronbach alpha value of 72% was utilized in collection of data from CEO/Managers of the sampled SMEs, of which 224 questionnaires were retrieved. The study revealed that tax knowledge, tax audit, tax rate and tax penalty exert positive significant effect on tax compliance, while tax system complexity and perception of tax fairness exhibit negative but significant effect on tax compliance of sampled SMEs in Nasarawa State. The study thus recommended among others that, government should simplify and streamline tax laws and regulations to enhance the understandability and accessibility for taxpayers as this increases the level of tax compliance. The study also recommended that, government should endeavour to develop specialized and targeted educational programs that focus on the unique needs and challenges faced by SMEs in understanding and fulfilling their tax obligations.

Keywords: Tax compliance, Tax system complexity, Tax knowledge, Tax audit, Tax rate, and Tax fairness.

INTRODUCTION
The revitalization and sustainability of the contemporary economy hinge significantly on the pivotal role played by micro small and medium-scale enterprises (SMEs). These entities not only create significant employment opportunities but also function as crucial engines of innovation for the global economy. In developing countries, SMEs account for the majority of businesses and are important contributors to job creation and global economic development. They represent about 90% of businesses and more than 50% of employment in Africa. Their compliance level has enabled them to contribute up to 40% of the national income or gross domestic product (GDP) in emerging economies. These numbers are significantly higher when informal SMEs are included. In emerging markets, most formal jobs are generated by SMEs, which create 7 out of 10 jobs (World Bank, 2020).

SMEs in Nigeria account for 96% of business enterprises and 84% of employment opportunities with a total number of about 17.4 million (IMF, 2018; PwC, 2019). They account for over 50% of the industrial employment, 90% of the manufacturing sector in terms of the number of enterprises and dominance in agriculture (IMF, 2018). One of the most important roles attributable to SMEs is the ability to generate employment for a great majority of people (Lawal et al., 2020). In contrast to the contributions of SMEs to the national GDP, the same SMEs account for the increasing level of tax evasion in Nigeria (Aladejebi, 2018).

Taxes are essential instruments used for the efficient and long-term functioning of the government; they are also used for the creation and redistribution of social welfare. Thus, taxes are fundamental to the existence of governments, since tax revenues help to finance the bulk of services such as education, welfare, public safety, infrastructure and other basic public services of government. Therefore, government would always try to put in place policies that would help to improve tax compliance; since improved tax compliance amplifies the revenues available for supporting public services without increasing the current tax burden on compliant taxpayers (Bird, 2019).

In Nigeria, dwindling in non-oil revenue has contributed to setback in aggregate revenue generation as the contributory quota of tax revenue to the GDP of the country is discouraging (Ayuba, et al., 2018; Oghuma, 2018). In the light of the foregoing, the tax-to-GDP ratio in Nigeria increased by 1.1% from 5.5% in 2020 to 6.7% in 2021, which was lower than the average of the 33 African countries in 2023 (15.6%) by 8.9% points. However, the Revenue Statistics in Africa 2023 publication has remained unchanged over the same period. Yet, the highest tax-to-GDP ratio reported in Nigeria since 2000 was 9.7% in 2011, with the lowest being 5.3% in 2016 (Revenue Statistics in Africa, 2023). To this end, Giulia et al. (2014) and Ahlerup et al. (2015) posited that the governments of developing countries, especially sub-Saharan Africa countries, collect much lower proportions of their GDPs of tax revenue which is less than average (16%) even if they have high capacity to raise tax revenue to promote their economic development.

According to the Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN), 80% of SMEs die before they are five years. One of the factors attributed to this high mortality rate is tax related matters. These tax-related matters include multiple taxation, high tax rates and penalties (Adebisi & Gbegi, 2013). Lack of knowledge of the transaction dynamics of SMEs, payment for accumulated taxes of up to six years, adverse publicity leading to loss of customers as a result of government tax officials sealing companies have also contributed to the closure of most SMEs. Studies have revealed that more than 50% potential tax revenue remains uncollected in most developing countries (Amanamah, 2016).

In addition, the Nigerian tax system is often described as complex and cumbersome, with multiple overlapping taxes, frequent amendments to tax laws, and perceived inefficiencies in tax administration. These factors contribute to a low level of tax compliance among SMEs. According to Fagbemi et al. (2010), the complexity and ambiguity of tax regulations are significant deterrents to tax compliance in Nigeria. Thus, numerous changes in tax laws in Nigeria often overwhelm lay taxpayers, including small entrepreneurs, due to the significant burden they impose. The more complex a tax system is, the higher the compliance cost would be, and finally individual and business change their behaviour in response to tax policies (Laffer et.al., 2011). Erich et al. (2006) in Saad (2009) claim that tax complexity results negative paradigm towards current tax law and would further increase the unwillingness to fulfill their responsibility as a taxpayer. Additionally, the perceived fairness of the tax system and the general attitude of taxpayers towards tax obligations play crucial roles in compliance behaviour (Frey & Torgler, 2007). Therefore, to mitigate the challenge of tax non-compliance, it is necessary to understand factors influencing an individual's decision to comply with tax laws. Also, determinants of tax compliance are broadly related to economic approach and a behavioural approach (Mardhiah et al., 2 019).

Previous studies in extant literatures such as Giesi and Bishagazi (2022); Arkoh, et al. (2023); Nduruchi, et al. (2017); Deyganto (2018); Tehulu and Dinberu (2014) with robust findings have been conducted in countries other than Nigeria. However, their findings cannot be generalized in Nigeria SMEs context due to distinction in tax policies and system. Other studies conducted in Nigeria other than Nasarawa State are Salawu and Salawu (2023), who investigated the determinants of tax compliance of SMEs in Lagos State. Tax compliance was proxied by tax rate, tax audit, tax fairness, perception of government spending and tax awareness, and the study used the Pearson Correlation Coefficient to test the hypotheses. Adewale et al. (2022) conducted a study on the determinants of tax compliance in Nigeria using tax system, trust on government, fairness/openness, perception on government spending and government accountability as factors influencing tax compliance.

Appah and Godspower (2023) also examined determinants of tax compliance behaviour and sustainable economic growth among SMEs in Nigeria using tax penalty, tax fairness, perceived opportunity of tax evasion, tax audit and tax system as factors influencing tax compliance. Both studies used ANOVA to analyze the data collected. Rabiu and Mustafa, (2020) investigated Tax Compliance Determinants in Katsina State (tax rate, level of income, perception on government spending, change in government policies, simplicity of tax system, efficiency of tax authority, perception on equity and peer influence were used as the determinants) using Multinomial Probit Regression. Atawodi and Ojeka (2012) assessed the determinants of tax compliance in North Central Nigeria, and used Ordinary Least Square regression model for analysis of data.

Despite the comprehensive review of empirical research by scholars worldwide, there is a significant lack of empirical studies examining the determinants of tax compliance of SMEs, as well as limited variable combination. This study, therefore, aims to fill this gap by providing empirical evidence and analysis of how the combined determinants (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception of tax fairness) influence tax compliance behaviour of SMEs in Nasarawa State. The study also aims to enhance the research scope in this area by closing the population gaps by examining the determinants of tax compliance of SMEs in Nasarawa State from 2019 to 2023.
Specifically, to examine the determinants of tax compliance of SMEs in Nasarawa State, the study aims to:

i. Examine the effect of tax system complexity on tax compliance of SMEs in Nasarawa State.
ii. Examine the effect of tax knowledge on tax compliance of SMEs in Nasarawa State.
iii. Determine the effect of tax audit on tax compliance of SMEs in Nasarawa State.
iv. Examine the effect of tax rate on tax compliance of SMEs in Nasarawa State.
v. Determine the effect of tax penalties on tax compliance of SMEs in Nasarawa State.

vi. Assess the effect of perception of tax fairness on tax compliance of SMEs in Nasarawa State.

In the light of the foregoing, the following hypotheses are raised:

H_{01}: Tax system complexity has no significant effect on tax compliance of SMEs in Nasarawa State.

H_{02}: Tax knowledge has no significant effect on tax compliance of SMEs in Nasarawa State.
H_{03}: Tax audit has no significant effect on tax compliance of SMEs in Nasarawa State.
H_{04}: Tax rate has no significant effect on tax compliance of SMEs in Nasarawa State.
H_{05}: Tax penalty has no significant effect on tax compliance of SMEs in Nasarawa State.
H_{06}: Perception tax fairness has no significant effect on tax compliance of SMEs in Nasarawa State.

LITERATURE REVIEW

Concept of Tax Compliance

Tax compliance refers to the extent to which individuals, businesses, and other entities adhere to the tax laws and regulations set by the government. It involves fulfilling one's legal obligations related to filing accurate tax returns, reporting income, and paying the appropriate amount of taxes in a timely manner. Jackson and Milliron cited in Adekoya et al. (2019) define tax compliance as complying with the provisions of tax laws and regulations on tax payment and meeting tax obligations according to the relevant and applicable laws and regulations, without court or other enforcements. It is the ability to complete tax returns promptly in line with relevant tax laws at the right time. It is based on the system of self-assessment by taxpayers. It is the efforts that taxpayers voluntarily exercise in honouring their tax obligation promptly (Badara, 2012). Tax compliance is the ability to fulfil all tax obligation payments in line with the relevant tax regulations and laws (Thiga & Muturi, 2015). Therefore, for the purpose of this study, tax compliance is defined as the process by which taxpayers voluntarily comply with the relevant tax laws and regulations by taking care of their tax obligations without being required to do so (Zandi & Rabbi, 2015). Thus, it emphasizes on the act of willingly and knowingly fulfilling tax obligations by timely paying taxes in accordance with relevant tax legislation.

Tax System Complexity

Tax system complexity is a significant factor influencing tax compliance among individuals and businesses. The complexity of a tax system could be defined by the number and intricacy of tax laws, the difficulty of compliance procedures, and the clarity of tax regulations. This complexity often poses substantial challenges to taxpayers, especially SMEs, which may lack the resources to navigate complicated tax environments effectively. Tax laws are often too complex to be understood by a laymen person (Kirchler, 2007). Laffer et.al. (2011) opined that the more complex a tax system is, the higher the compliance cost would be, and finally individual and business change their behaviour in response to tax policies. Erich et al. (2006) in Saad (2009) claim that tax complexity results negative paradigm towards current tax law and further increases the unwillingness of tax payers to fulfill their responsibilities.

Tax Knowledge

Tax knowledge refers to an individual's or entity's understanding of tax laws, regulations, and procedures. It encompasses the awareness and comprehension of various aspects of taxation, including the determination of taxable income, applicable deductions and credits, filing requirements, and the overall obligations imposed by tax authorities. The influence of tax knowledge on compliance behaviour has been described in various research. Previous studies have evidenced that tax knowledge has a very close relationship with taxpayers' ability to comply (Singh & Bhupalan, 2001). Ermias (2014), Mesfin (2016) and Redae and Sekhon (2016) concluded that tax knowledge has significant impact on tax compliance attitude of the taxpayers.

Tax Audit

Tax audit is a routine examination of the tax returns, accounts, books, records, documents of a taxpayer by the authority in order to ascertain the level of compliance with the relevant tax laws. Tax audit entails checking a company's books of accounts and other records to ensure that the prospective tax liability information contained in the financial statements is accurate (Cai et al., 2019). According to Olaoye et al. (2018), effective tax audit significantly impacts the overall tax revenue accruable to the government. It was further established that there was no particular provision under Companies Income Tax Act (CITA) for tax audit until Section 43 Subsection 4 of CITA, 2004 was introduced. In the view of Nurebo et al. (2019), one of the benefits of tax audit is that it fosters and improves tax compliance. Modugu and Anyaduba (2014) discovered that tax audit has a favourable association with company tax compliance in Nigeria, but Olaoye and Ekundayo (2018) discovered that tax compliance is insignificantly affected by tax audit in Nigeria.

Tax Rate

Another factor that determines taxpayers' compliance is tax rate. It is the percentage at which a tax is levied on an individual's or entity's taxable income, transactions, or other taxable bases. Tax rates are set by governmental authorities, such as federal, state, or local governments, and they vary based on the type of tax and the applicable jurisdiction. It also plays a significant role in shaping tax compliance behaviour. According to Mghase (2015), it is shown that the changes in national tax laws and regulations such as tax rates and electronic tax system positively influence the level of tax compliance. On the other hand, an affordable tax rate enhances voluntary tax compliance among taxpayers (Kipilimba, 2017; Mandari, 2017). Previous studies show that unsystematic arrangement of tax rate increases bias and hence cause corruption and decrease the level of tax compliance in developing countries (Oladipupo & Obazee, 2016).

Tax Penalties

Tax penalty is a punitive measure that the tax law imposes for the act of non-compliance (Oladipupo & Obazee, 2015). Penalty has positive and significant effect on tax compliance decision which indicates that this association between penalty and tax compliance is towards the argument that severe penalties and sanctions are used to achieve greater compliance level and curb future actions of tax evaders. This means that as the severity of penalties increases, the tax compliance level of taxpayers would also increase and vice versa (Manchilot, 2018).

Perception of Tax Fairness

Fairness perception is generically the equity of the system being perceived as just or positive (Latif et al., 2023). Fairness is one of the must-have characteristics in tax system. Fairness refers to situation whereby taxpayers are taxed according to their capability (Lymer & Oats, 2009). The fairness of a tax is a relative measure of its ability to judge taxpayers on a similar basis and is used to measure how good the tax system of a country is (Thomas, 2012). Tax fairness has been recognized as one of the attributes of a sound tax system (Wrede, 2014), and it plays a vital role in determining a tax compliance behaviour of taxpayers. Ahmad and Hijjatulah (2019) also examined the effect of tax fairness on sales tax compliance using the survey method, and discovered that tax fairness significantly influences sales tax compliance among Jordanian manufacturing SMEs. However, studies conducted by Assfaw and Sebhat (2019) indicated statistical insignificant relationship between tax fairness and tax compliance behaviour.

Empirical Review

Kilimvi and Adepehin (2023) examined the impact of tax audit and tax investigation on tax compliance of businesses using Lagos State as a case study. Quantitative research methodology was used as predestined by the purpose of this research. Secondary data were reviewed for the analysis. Descriptive statistics was employed for the data analysis, and ordinary least squares method was employed to provide answers to the research questions and test the hypotheses. Additionally, inter-relational impact of tax audit and tax investigation on tax compliance on businesses was examined using Pearson's correlation coefficient. A deductive research design was chosen. The findings showed that the degree of tax compliance of businesses in Lagos State has a positive correlation to tax audit and tax investigation.

Chindengwike and Kira (2022) examined the effect of the tax rate on taxpayers' voluntary compliance in Tanzania. In addressing this objective, both qualitative and quantitative research approaches were used. A cross-sectional survey research design technique was used. The study employed document review, and survey in collecting both primary data and secondary data. Besides, systematic, unsystematic random sampling and purposive sampling were used as sampling procedures. The study involved a sample size of 99 respondents who are SMEs' taxpayers. The findings of the study showed that there is a negative effect of tax rate on taxpayers' voluntary compliance. Again, the study indicated that the presence of good tax rates improves taxpayers' voluntary compliance, and the tax rates influence taxpayers' voluntary compliance. Lastly, there is statistical significance between tax rates and voluntary taxpayers' compliance in Tanzania. However, the tax systems and policies in Nigeria and Tanzania are likely to differ in terms of structure, rates, and enforcement mechanisms. Therefore, the impact of tax rate on tax compliance may vary based on the unique features of each country's tax regime.

Rabiu and Mustafa (2020) evaluated tax compliance determinants using data generated from agro-allied industries in some selected local government areas of Katsina State, Nigeria. Primary source of data was employed through the use of structured questionnaire to collect relevant information from all the 133 agro-allied industries in the study area and multinomial probit model was adopted for estimation. The findings from the study indicated that tax rate, level of income, perception on government spending, change in government policy, simplicity of tax system and efficiency of the tax authority are significant determinants of tax compliance among agro-allied industries in the study area, whereas perception on equity and peer influence are insignificant determinants. However, Katsina State and Nasarawa State are distinct regions with variations in economic activities, industries, and socio-economic conditions. Factors influencing tax compliance in Katsina may not necessarily align with those in Nasarawa due to regional disparities. Hence, there is need to extend the frontier of knowledge for reliable decision-making in Nasarawa State.

Musimenta (2020) examined the relationship between knowledge requirements, complexity of the tax system and tax compliance in Uganda while exploring the indirect effects of compliance costs. The research design was cross sectional and correlational using VAT registered withholding agents. This study results suggest that knowledge requirements do not have a significant relationship with compliance costs and tax complexity has a direct and indirect impact (through compliance costs) on tax compliance. In addition, the result shows the indirect effect of compliance costs in establishing the basis for understanding taxpayers' compliance. However, Nigeria and Uganda have distinct cultural, social, and economic contexts. Tax regulations may vary significantly between the two countries. Therefore, findings related to tax system complexity and compliance in Uganda may not be transferable to Nigeria due to these cultural and socioeconomic differences. Hence, conducting a similar study in Nigeria, considering its unique socio-economic and cultural aspects, would be more appropriate for drawing conclusions relevant to the Nigerian tax landscape.

Hery and Jasman (2019) investigated the effect of perceived tax equity (vertical, horizontal and exchange), normative expectation (social and moral norms) and legal sanctions (detection risk and penalty magnitude) toward tax compliance intentions in Jakarta, the capital city of Indonesia. Quantitative method was used to obtain primary data. The sample used in this study consisted of 75 individual taxpayers who work as employees. The result of the study showed that equity perception has positive and significant effect on tax compliance intentions, while moral and social norms have positive and significant effect on tax compliance intentions.

Oghuma (2018) examined the influence of tax audit and penalty on tax compliance paradigm of companies' income taxpayers in Nigeria. The population for the study comprised all registered corporate taxpayers in Nigeria. A total of 150 corporate taxpayers whose tax files are domiciled in Edo State were selected for the study. The selection of the sample size was based on stratified random sampling method. To evaluate the strength of the measures used, Ordinary Least Square (OLS) regression was used for model estimation through Econometric Views (EViews) software. Findings revealed that tax audit and tax penalty have positive and significant relationships with tax compliance. It was thus recommended that effective tax compliance could be achieved by increasing the frequency of tax audit and by strengthening tax penalty to serve as deterrent mechanism against noncompliance.

Remali et al. (2018) examined the determinants of tax compliance in SMEs, focusing on how tax knowledge, tax penalty and tax rate affect tax compliance behaviour of SMEs in Selangor. The determinants that served as the independent variables are tax knowledge, tax penalty, tax rate and the dependent variable tested is tax compliance. The population of the study covered the SME in Selangor. A total of 105 questionnaires were collected and used for analysis using descriptive, reliability, normality and correlation analysis. The findings revealed that tax knowledge, tax penalty and tax rate demonstrated significant relationship with tax compliance among the SMEs.

Fauziati et al. (2016) examined the impact of tax knowledge on tax compliance in Kota Padang, Indonesia. The survey research design was used in conducting the investigation. Primary source of data was used and 300 copies of self-administered questionnaire were distributed. The number of questionnaires completed and returned was 237, constituting 79% response rate. The simple linear regression model was used to estimate the relationship between tax knowledge and tax compliance. The t-statistics was used to test the significance of the study variables. It was revealed that tax knowledge has no impact on tax compliance. However, Nigeria and Indonesia have distinct cultural, social, and economic contexts. Attitudes toward taxes may vary significantly between the two countries. Therefore, findings related to tax knowledge and compliance in Indonesia may not be transferable to Nigeria due to these cultural and socioeconomic differences. Hence, conducting a similar study in Nigeria, considering its unique socio-economic and cultural aspects, would be more appropriate for drawing conclusions relevant to the Nigerian tax landscape.

Oladipupo and Obazee (2016) investigated the impact of taxpayers' knowledge and penalties on tax compliance amongst small and medium enterprises in Nigeria using a survey research design. The data obtained from the questionnaire was analyzed using the OLS regression method. The results showed that tax knowledge has positive significant impact on tax compliance, while tax penalty has insignificant positive impact on tax compliance. Thus, the study showed that tax knowledge has a higher tendency to promote tax compliance than tax penalty. The study, therefore, recommended that Government should increase public knowledge on tax matters and tax education should always be included in school curricula. Small and medium-scale business owners should also seek to advance their tax knowledge and awareness for the mutual benefit of the governments and taxpayers.

Mebratu (2016) examined the impact of tax audit on tax compliance in Ethiopia, at federal level by using secondary macro data. To analyze the data, the partial coefficient regression statistical analysis method was employed. The Pearson correlation and bivariate regression result showed that there is a strong association between probability of audit detection and the level of tax compliance. The regression results also revealed that there is a strong association between the number of audited files and the level of tax compliance. Pearson Correlation and partial regression coefficient result showed that the there is a strong association between probability of audit detection and the number of audited files with the level of tax compliance. The partial coefficient regression result showed that the joint effect of probability of audit detection and number of audited files highly improves the level of taxpayer's compliance over the individual effect. However, the study focuses more on Ethiopia tax system and due to differences in tax system, the findings of Mebatu (2016) in reference to tax audit cannot be used for decision making purposes in Nigeria. Hence, engaging in comparable research in Nigeria, while considering the distinctive tax system, cultural variables, and institutional framework, would be more suitable for deriving conclusions that are pertinent to the Nigerian tax landscape.

Theoretical Framework

The deterrence theory of punishment could be traced to the early works of classical philosophers such as Thomas Hobbes (1588–1678), Cesare Beccaria (1738–1794), and Jeremy Bentham (1748–1832). According to Allingham and Sandmo (1972), the economic deterrence model assumes that a variety of factors, including tax rates, the benefits of tax evasion, the likelihood of fraud being detected, and the severity of penalties for doing so could influence taxpayers' behaviour. Therefore, rational decisions are made amidst uncertainty, where tax evasion could lead to tax savings or penalties (Fjeldstad et al., 2012). As such, the more likely tax evasion is to be discovered and punished more severely, the fewer people would engage in it.

Research on tax compliance has been based on the "economic deterrence" approach which considers both economic and structural factors in relation to compliance. The economic deterrent theory assumes that taxpayers are moral profit seeking and their actions are motivated by the calculation of costs and the opportunities that come with that. The economic deterrence approach suggests that taxpayers make a cost–benefit analysis when deciding on compliance outcomes and relies on enforcement for compliance to work (Yong, 2006).

METHODOLOGY

This study employed a survey research design. The design allows for an in-depth examination of a specific phenomenon and facilitates the generalization of findings from a sample study to a larger population. The chosen methodology aligns with previous research studies, such as those conducted by Charles et al. (2020), Ahmad and Hijjatulah (2019), Olaoye and Ekundayo (2020), and Aladejebi (2018). The study population is limited to only 504 active SMEs in Karu Local Government and the targeted respondents are the CEOs/Managers and Accountants of each SME, thus, making a total population for the study of 1,008 respondents. However, using Taro Yamane, (1967) formula {n = $\frac{\boldsymbol{N}}{\boldsymbol{1+N\ (e)2}}$,}, 286 respondents were selected as the study sample size. A simple random sampling technique was employed in selecting the SMEs used for the study. Data was collected through questionnaires, hence primary source of data was employed in the study. A close-ended questionnaire with 5-point Likert's scale comprising strongly disagreed-1, disagreed-2, neutral-3, agreed-4, strongly agreed-5 was distributed online as a web-based questionnaire using Google forms. However, 224 questionnaires were retrieved, making approximately 78% out of 100%. Using the internal consistency method for test of reliability, the Cronbach's Alpha formula derived a value of 72%, which indicates high reliability of the research instrument. Therefore, to examine the relationship between the determinants and tax compliance, the linear relationship between the variables is depicted thus:

$$\text{TCOM} = \beta_0 + \beta_1 TCPLX + \beta_2\text{TKNW} + \beta_3\text{TAUD} + \beta_4\text{TART} + \beta_5\text{TPEN} + \beta_6\text{PTFR} + \mathcal{E}$$

Where: TCOM = Tax Compliance; β_0 = *Intercept;* β_1 *to* β_6 = *Regression Coefficients*; *TCPLX* = Tax System Complexity; TKNW = Tax Knowledge; TAUD = Tax Audit; TART = Tax Rate; TPEN = Penalties; PTFR = Perception of Tax Fairness; and $\mathcal{E}$ = *Error Margin*

RESULTS AND DISCUSSION

Table 1: Correlation Matrix

		TCOM	TCPLX	TKNW	TAUD	TART	TPEN	PTFR
TCOM	Pearson Correlation	1	.941**	.656**	.842**	.393**	.862**	.311**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	224	224	224	224	224	224	224
TCPLX	Pearson Correlation	.941**	1	.679**	.841**	.449**	.883**	.189**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.004
	N	224	224	224	224	224	224	224
TKNW	Pearson Correlation	.656**	.679**	1	.847**	.062	.498**	-.234**
	Sig. (2-tailed)	.000	.000		.000	.359	.000	.000
	N	224	224	224	224	224	224	224
TAUD	Pearson Correlation	.842**	.841**	.847**	1	.180**	.722**	-.039
	Sig. (2-tailed)	.000	.000	.000		.007	.000	.565
	N	224	224	224	224	224	224	224
TART	Pearson Correlation	.393**	.449**	.062	.180**	1	.437**	.230**
	Sig. (2-tailed)	.000	.000	.359	.007		.000	.001
	N	224	224	224	224	224	224	224
TPEN	Pearson Correlation	.862**	.883**	.498**	.722**	.437**	1	.247**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	224	224	224	224	224	224	224
PTFR	Pearson Correlation	.311**	.189**	-.234**	-.039	.230**	.247**	1
	Sig. (2-tailed)	.000	.004	.000	.565	.001	.000	
	N	224	224	224	224	224	224	224

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Version (insert the particular version of SPSS used) Output

Table 1 shows the relationship between dependent variable (tax compliance) and independent variables (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception on tax fairness). The Pearson correlation coefficient of 1.000 shows that each variable incorporated in the model is perfectly positively correlated with itself. The result shows that all the independent variables i.e. tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception on tax fairness were found to be significantly positively correlated with tax compliance at 1% significance level with P<0.01.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.765[a]	.779	.724	.13552

a. Predictors: (Constant), TCPLX, TKNW, TAUD, TART, TPEN, PTFR

Source: SPSS (insert the particular version of SPSS used) Output

The R-square (coefficient of determination) of 0. 779 explains that about 78% of the systematic variation in tax compliance are explained by the determinants (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception of tax fairness) while the remaining 22% represents other variables that could explain tax compliance but were not captured in the study. However, this was moderated by the adjusted R-squared to approximately 72%, thus signifying that other variables outside the explanatory variables influence tax compliance in Nasarawa State.

Table 3: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.224	6	8.871	482.972	.000[b]
	Residual	3.986	217	.018		
	Total	57.210	223			

a. Dependent Variable: TCOM

b. Predictors: (Constant), TCPLX, TKNW, TAUD, TART, TPEN, PTFR

Source: SPSS (insert the particular version of SPSS used) Output

The ANOVA table shows the goodness of fit of the model. The criterion is that if significant value is less than 0.05 and 95% level of confidence, it signifies that the model of the study is fit. Therefore, from Table 4.3, the value of the significant, 0.000 is less than 0.05, hence this implies that the study model is fit.

Table 4: Coefficients[a]

		Unstandardized Coefficients				
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.322	.392		-.820	.413
	TCPLX	-.253	.026	.533	9.553	.000
	TKNW	.260	.062	.056	1.444	.022
	TAUD	.392	.031	.268	5.572	.000
	TART	.0213	.060	.004	3.523	.000
	TPEN	.413	.041	.118	2.896	.004
	PTFR	-.284	.065	.203	9.615	.000

a. Dependent Variable: TCOM

Source: SPSS (insert the particular version of SPSS used) Output

Table 4 presents the regression analysis of the explanatory variables (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception of tax fairness) and the explained variable (tax compliance). From the table, it is observed that tax system complexity has a negative significant influence on tax compliance with a coefficient of -0.253, standard error value of 0.026, and a corresponding p-value of 0.000. This implies that a change in tax system complexity decreases the level of tax compliance. i.e. The negative sign in the coefficient value expresses that tax system complexity has an inverse relationship with tax compliance. The higher the complexity, the less tax compliance would be obtained. However, since the p-value of 0.000 is less than 5% level of significance, it then implies that tax system complexity has statistically significant effect on tax compliance by SMEs in Nasarawa State. This finding is consistent with the research result done by Saad (2009) and Erich et al. (2006) who claimed that complexity in tax law resulted in a negative perception of the tax system and consequently encouraged an unwillingness to comply.

The result shows that increase in the level of tax knowledge leads to increase in tax compliance by 26% as indicated by its coefficient value of 0.260 and a p-value of 0.022. However, since the p-value of 0.022 is less than the 5% level of significant, it indicates that the result has significant statistical implication. This finding is consistent with that of Oladipupo and Obazee (2016).

Tax audit is also one of the determinants of tax compliance. The result shows that the coefficient value of tax audit is 0.392 with a standard error of 0.031 with a t-statistics of 5.572 and a p-value of 0.000. This result therefore shows that a unit increase in the level of tax audit will lead to a 39.2% increase in the level of tax compliance with statistical significance. This result, therefore, indicates that when the tax authorities step up their effort in tax audit, SMEs are made to comply more with the tax payment. This finding aligns with those of Kilimvi and Adepehin (2023) and Mebratu (2016).

The result shows that the coefficient of tax rate is 0.213 with a standard error value of 0.060, a t-statistics value of 3.523 and a p-value of 0.000. The result, therefore, implies that a unit increase in the rate of tax would lead to a 21.3% increase in the level of compliance by SMEs. The result does not depict the apriori expectation that when the rate of tax increase, compliance should decrease. The result, therefore, suggested that increase in tax rate is often followed by serious monitoring by tax authorities to ensure compliance by the taxpayers. Also, when the burden of the increase in tax rate is shifted to the taxpayer of an elastic good, the businesses do not bear the burden directly, and so they could easily comply by remitting the applicable tax to the appropriate tax authority. The finding is contrary to the finding in the work of Chindengwike and Kira (2022).

The result also shows that tax penalty has coefficient of 0.413 with a standard error value of 0.041, a t-statistics value of 2.896 and a corresponding p-value of 0.004. This implies that a unit increase in the level of tax penalty imposed by the appropriate tax authorities would lead to a 41.3% increase in the level of tax compliance. Therefore, since the p-value of 0.004 is less than 5% level of significance, it then implies that tax penalty has statistically significant effect on tax compliance by SMEs in Nasarawa State. The result implies that taxpayers want to avoid tax penalties; therefore, they would rather comply than pay heavy penalty. The study finding is in consonance with the work of Oghuma (2018) and Ahmed (2013) that one way of ensuring tax compliance is to punish tax defaulters to serve as a deterrent against subsequent tax default.

Perception of tax fairness exert a negative but significant effect on tax compliance with a coefficient of -0.284, standard error of 0.065, t-statistics of 9.615 and a probability value of 0.000. This implies that an increase level of perception of tax fairness by the SMEs would reduce the level of tax compliance by 28%. However, since the p-value of 0.000 is less than the

5% level of significant, it indicates that the result has significant statistical implication. Therefore, the finding of the study is contrary to the finding of Hery and Jasman (2019).

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that tax system complexity has a negative and significant effect to tax compliance behavior of SMEs in Nasarawa State. This condition indicates that the higher complexity a tax regulation has, the more reluctant the taxpayers would pay their income taxes. It is not only about how complex the words are contained in tax regulations brochures and tax return, but also the complex step to calculate the actual income tax itself. The study also concludes that high level of tax knowledge leads to increase in tax compliance. For tax audit, it positively determines tax compliance. This, therefore, indicates that when the tax authorities step up their effort in tax audit SMEs are made to comply more with the tax payment.

The result showed that increase in tax rate leads to increased tax compliance. It is concluded that increase in tax rate is often followed by serious monitoring by tax authorities to ensure compliance by the taxpayers. It is, therefore, concluded that increased tax rate leads to more tax compliance because in the aftermath of rate increases there is usually a strong monitoring to ensure compliance. It was found that tax penalties positively affect tax compliance. The result implies that taxpayers want to avoid tax penalties therefore will rather comply than pay heavy penalty. It is, therefore, concluded that whenever the tax authorities employ tax penalties against tax defaulters it will lead to increased tax compliance. Both tax authority and taxpayers accept that fairness in tax system is one of the determinants factors that affect tax compliance. Thus, the study concludes that perception of tax fairness has a negative effect on SMEs tax compliance.

Recommendations

Considering the findings and the conclusion arrived at in this study, the following recommendations are made:

(i) Government should simplify and streamline tax laws and regulations to enhance the understandability and accessibility for taxpayers. This could include reducing the number of forms, minimizing the volume of required documentation, and clarifying any ambiguous language.

(ii) Government should endeavour to develop specialized and targeted educational programs that focus on the unique needs and challenges faced by SMEs in understanding and fulfilling their tax obligations as well as creating an environment conducive to continuous learning and improvement by providing tailored and accessible resources.

(iii) Continuing regular tax audits is also recommended as it sends a strong signal to taxpayers about the seriousness of the authority regarding tax compliance. This approach conveys that any default or concealment will not go unnoticed. Given the observed positive and significant impact of the tax rate on tax compliance, it is imperative for tax authorities or policy makers to prioritize effective monitoring of tax rate implementation and enforcement. This strategic approach is essential to attain the highest possible level of compliance.

(iv) Tax penalties have been identified as a mechanism to boost compliance levels. However, it is advisable for Tax Authorities to utilize penalties for ensuring compliance only after exhausting all diplomatic avenues for issue resolution. Clear communication of tax penalties for each tax default is crucial, ensuring transparency and awareness among taxpayers. The enforcement process should be straightforward, efficient, and cost-effective for the authority.

(v) To address concerns related to perception of tax fairness, it is imperative for the government to ensure an equitable distribution of the tax burden across different segments of the business community. This measure aims to foster a sense of fairness and equality in the tax landscape, promoting a more supportive and just environment for all taxpayers.

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IMPACT OF CAPITAL STRUCTURE ON THE FIRM VALUE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study examined the effect of capital structure on the firm value of listed deposit money banks in Nigeria. The study adopted ex-post facto and correlational research design and the population of this study comprised all the 14 deposit money banks listed on the Nigerian Exchange Group as at 31st December 2022 from which 10 banks were selected as samples using a special filter technique. Data was collected from the sampled company's audited annual reports for the period of 10 years from 2013–2022. The data collected was analyzed under descriptive statistics, correlational analysis and regression analysis headings after necessary robustness tests were conducted using SPSS software. Four hypotheses were formulated and tested using p-values with significance pegged at 0.05. The study found that short term debt has a significant negative effect on net interest margin; total debt to total assets ratio has a significant negative effect on firm value; equity ratio exerts positive but insignificant impact on firm value measured by net interest margin; and gearing (debt-to-equity) ratio was found to have a significant negative effect on firm value. Based on these findings the study recommended that banks should be cautious about over-reliance on short-term debt financing, and policies should be put in place to manage and control the level of short-term debt; banks should prioritize internal financing over short-term debt to maintain financial health and value, and they should carefully manage their overall debt levels; banks should prioritize long-term debt over short-term debt to maintain financial health and value, and finally banks should consider policies that encourage equity financing, such as issuing new shares or retaining earnings.

INTRODUCTION
Globally, corporate entities are faced with the problem of determining appropriate finance that would boost the value of the entity and maximize the wealth of shareholders (Bello et al., 2020). The expectation of all shareholders is exclusively on how the overall wealth would be maximized and consistency in achieving this objective could only be guaranteed if the going concern of the bank is not threatened by any constraints as survival is determined by the level at which available capital in form of debt or equity or any other means is sourced and merged where necessary in order to fund its operations for maximum returns (Adeoye & Olojede,

2019). The situation involving capital structure as a corporate governance tool has given rise to contentious issues and has recently drawn a lot of interest from regulators, professionals, investors, and academics. This is due to contradictory ideas in capital structure theories about what really constitutes capital structure (Uremadu & Efobi, 2018).

One of the most discussed financial subjects among academics and researchers is capital structure. Its significance comes from the fact that it is directly linked to businesses' capacity to meet the needs of many stakeholders. The principal claims to a firm's assets are represented by the capital structure. This contains many forms of both liabilities and equities. According to Uremadu and Efobi (2012), referenced in Uremadu and Onyekachi (2018), a firm's capital structure is a crucial component that improves performance. Capital structure, also referred to as finance leverage signifies the proportion of debt and equity utilized to fund a business's asset formation. It has been a significant issue from the perspective of strategic management since it is connected to a company's capacity to satisfy numerous stakeholders' demands.

Uremadu and Onyekachi (2018) noted that the most important factor affecting a company's functioning is its capital structure. The choice of the capital structure would have a significant impact on the sustainability of the company. An organization's capital structure has a direct impact on its capacity to meet the needs of its stakeholders. The analysis of a company's capital structure is a challenging process. According to Uremadu (2014), capital structure of a firm includes retained earnings, debt and equity capital. This concurs with Pandey's (2010) assertion that the capital structure is the proportionate relationship between debt and equity. Paid-up share capital, share premiums, reserves, and surplus (sometimes known as retained earnings) are all considered to be equity.

LITERATURE REVIEW

Conceptual Framework

Views of other scholars on the subject of capital structure and firm value were synthesized and reviewed with the aim of obtaining a detailed understanding of the subject matter.

Concept of Capital Structure

According to Okeke and Okeke (2019), capital structure is particular mix of debt and equity a company uses to finance its entire improvement as a result. A Company's capital structure is arguably one of its most important choices. From a technical perspective, the capital structure is defined as the careful balance between equity and debt that a business uses to finance its assets, day to day operations and future growth (Kateri, 2014).

Theoretical Framework

This study considers the Miller and Modigliani (MM) Theory, Agency Cost Theory and Traditional Theory.

Miller and Modigliani Theory

Modigliani and Miller (M&M, 1958) Theory illustrates that, under certain key assumptions, a firm's value is unaffected by its capital structure. Capital market is assumed to be perfect in

M&M world, where insiders and outsiders have free access to information; no transaction cost, bankruptcy cost and no taxation exist. Equity and debt choice become irrelevant and internal and external funds could be perfectly substituted. The MM theory argues that the value of a firm should not depend on its capital structure.

The theory argues further that a firm should have the same market value and the same weighted average cost of capital at all capital structure levels because the value of a company should depend on the return and risks of its operation and not on the way it finances those operations. If these key assumptions are relaxed, capital structure may become relevant to the firm’s value. Meanwhile, this theory was criticized on the ground that perfect market does not exist in real world. Attempts to relax these assumptions, particularly the idea of no bankruptcy cost and no taxation, led to the trade-off theory.

The M&M theorem is a fundamental theory in corporate finance that provides insights into the relationship between a firm's capital structure and its market value; it serves as a theoretical foundation to understand how the capital structure decisions of banks may affect their market value.

Pecking Order Theory

The pecking order theory of capital structure, as propounded by Donaldson (1961), is among the most influential theories of corporate leverage. The theory goes contrary to the idea of firms having a unique combination of debt and equity finance, which minimizes their cost of capital. It is the main contender to the trade-off theory, and it suggests that actual corporate leverage ratios typically do not reflect capital structure targets, but rather the widely observed corporate practice of financing new investments with internal funds when possible and issuing debt rather than equity if external funds are required. In the pecking order model, an equity offering is typically regarded as a very expensive last resort.

Traditional Theory

The Traditional Theory of capital structure believes strongly on the relevance of optimal capital. According to the traditional theory, debt capital is cheaper than equity and as such a company could increase its value by borrowing up to a reasonable limit. The theory assumes that the cost of debt would remain constant until a significant point is reached when it would start to rise; the weighted average cost of capital (WACC) would fall immediately an external source of finance is introduced and would commence rising thereafter as the level of gearing increases. The company’s market value and the market value per share would be maximized where WACC is at the lowest point. This theory opined that there is an optimal capital structure which maximizes the firm’s value and minimizes the cost of capital; it is of the belief that the firm’s value cannot be the same at different levels of capital structure.

Having considered the various theories, this research work is anchored on the M&M theory. The M&M theorem provides a theoretical foundation to analyze whether and how the capital structure choices of these banks influence their market value. By exploring the tax implications, regulatory environment, and potential financial distress costs faced by banks. Thus, this study assesses the applicability of the M&M theorem to the Nigerian banking sector.

METHODOLOGY

This study adopted the ex-post facto and longitudinal research design. The term "ex-post facto" is Latin for "after-the-fact." In research, this design involves studying the effects of an independent variable that cannot be manipulated or controlled (Saleh, 2023). It is essentially an observational study where the researcher collects data after the events of interest have occurred. The choice of an ex-post facto design is appropriate when it is not feasible or ethical to manipulate the independent variables. This design allows the researcher to analyze the existing differences in capital structure and firm value across listed deposit money banks without direct intervention (Tanko & Saman, 2019).

According to Okpo (2008), longitudinal research design involves making repeated observations or measurements over an extended period. It allows researchers to study changes or developments over time, capturing the dynamics and trends in the relationship between variables. The choice of a longitudinal design is grounded in the recognition that capital structure differences and their impact on value of firms may evolve over time. By making observations at different time intervals, the researcher gains insights into the subject matter. This design facilitates the identification of trends and potential causal relationships as used by Peter and Eyesan (2015); Idowu and Adegbie (2020).

Model Specification

The study adopted a multiple regression approach as expressed below:

$$NIM_{it}= a_0+a_1STDR_{it}+a_2TDR_{it} + a_3EQTR_{it}+ a_4GR_{it} + a_4Fsize_{it} + a_5AGE_{it} + a_4EPS_{it}+\mu \ldots 1$$

Where:
a= constant
NIM= Net Interest Margin being proxy for Firm Value
STDR = Short-Term Debt Ratio
TDR = Total Debt Ratio
EQTR = Equity Ratio
GR = Gearing Ratio
Fsize = Firm size (control variable)
AGE = Firm Age (control variable)
EPS = Earnings per Share (control variable)
μ= error term

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics in Table 4.1 offer a comprehensive overview of the key variables that contribute to the understanding of the subject matter. The descriptive statistics provide essential insights into the central tendencies and variations within the dataset, which includes both dependent and independent variables. The summary of these statistics is presented in Table 1.

Table 1: Descriptive Statistics of dependent and independent variables

Variable	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
NIM	.053	.101	.075	.0133	.052	1.121
STDR	.038	1.345	.044	.1462	7.615	5.195
TDR	.102	7.640	.263	.795	8.308	8.454
EQTR	.060	1.006	.196	.238	3.018	7.560
GR	.690	7.681	1.138	1.211	2.611	9.066
Fsize	18.678	22.891	21.23	.930	-.576	.619
AGE	1	77	39.28	18.804	.068	.574
EPS	.114	13.500	2.848	3.201	1.352	1.270

Source: Author's Computation using SPSS

Table 1 shows the mean score of NIM is 0.075 for the sampled listed DMBs during the study period. This implies that, for every one naira invested in interest earning assets, listed DMBs earned is approximately 8 kobo on it. The minimum NIM value recorded during this period was of 0.053 whereas 0.101 was its corresponding maximum value meaning that the bank with the lowest NIM 5kobo, while the highest NIM during the study period is 10kobo. Similarly, the standard deviation from the mean of NIM was 0.013, significantly falling below the mean, meaning there is low variation in the distribution of NIM in the sample. This shows that although some listed DMBs earned below average, there were some that earned about 10 kobo for every one naira invested in interest earning assets. The distribution is slightly positively skewed, indicating that most banks have a moderate level of NIM, which suggests stable interest income relative to their assets.

From the table also, it could be observed that STDR has a minimum and maximum 0.038 and 1.345. respectively indicating the smallest and largest short term debt portfolio measured as the ratio of short-term debt to total assets of the sampled firms. It further implies that some of the studied banks have an infinitesimal amount of short-term debt in their capital structure. It also reveals a mean of 0.044 and a standard deviation of 0.1462 indicating that while most banks maintain low levels of short-term debt, there are notable differences in their reliance on short-term financing, potentially reflecting diverse funding strategies or risk management practices.

Table 1 also shows that the minimum and maximum TDR are 0.102 and 7.640 respectively, demonstrate the wide range of leverage levels among the listed banks. The mean total debt ratio of 0.263 signifies on the average, proportion of total debt to total assets of the studied banks is 26.3%, with a substantial standard deviation of 0.795 indicating significant dispersion around the mean. The distribution is heavily positively skewed, indicating that most banks have relatively low total debt ratios, but some banks have significantly higher levels.

Furthermore, the minimum and maximum EQTR of 0.060 and 1.006 respectively, illustrate the range of equity financing levels across the banks. The mean equity ratio of 0.196 indicates the average proportion of equity relative to total assets, with a standard deviation of 0.238 highlighting variability in equity levels among the banks. This implies that while most banks maintain moderate to high levels of equity financing, there are differences in their capitalization structures. Similarly, the mean GR is 1.138, with a standard deviation of 1.211. The distribution is positively skewed, indicating that while most banks have moderate gearing levels, some banks have significantly higher levels, potentially indicating differing levels of financial leverage.

For the control variables, the mean Fsize is 21.23, with a standard deviation of 0.930. The distribution is slightly negatively skewed, suggesting that most banks in the sample are relatively large, with a few smaller banks present. The mean AGE is 39.28 years, with a standard deviation of 18.804. The distribution is positively skewed, indicating that most banks in the sample are relatively established, but there is some variability in the ages of the banks. EPS has a mean of 2.848, with a standard deviation of 3.201. The distribution is positively skewed, suggesting that while most banks have moderate earnings per share, there are some banks with significantly higher earnings, potentially indicating differences in profitability or efficiency.

Correlation Analysis

Correlation is used to describe the statistical association between two or more variables in order to express the relationships between and among the variables and for making of predictions regarding these relationships.

Table 2: Correlation Matrix of Dependent and Independent Variables

	NIM	STDR	TDR	EQTR	GR	Fsize	AGE	EPS
NIM	1.00							
STDR	-0.570**	1.00						
TDR	-0.158	-0.063	1.00					
EQTR	0.038	-0.046	0.002	1.00				
GR	-0.036	-0.067	0.222*	-0.014	1.00			
Fsize	0.086	0.106	-0.028	0.111	-0.019	1.00		
AGE	0.113	0.059	0.300**	0.215	0.101	0.324**	1.00	
EPS	0.157	0.524**	0.213	0.520**	0.234*	0.087	0.011	1.00

Source: Author's Computation using SPSS.

Table 2 depicts the correlation coefficients between the variables of the study. The values of the correlation coefficient range from -0.570 to 1. The sign of the correlation coefficient explains the direction of the relationship. When the coefficient is positive, it means that one variable increases as the other increases, while negative implies movement in an opposite direction (i.e. one decreases as the other increases). The absolute value of the correlation coefficient indicates the strength of the correlation. Higher values indicate a strong relationship while lower values indicate weak relationship. The correlation coefficients on the diagonal are 1.0000, which implies that each of the variables perfectly correlates with itself.

A noteworthy finding is the negative and statistically significant correlation (-0.570) between STD and NIM. This suggests a presence of negative linear association. In simpler terms, as the proportion of short-term debt within a bank's capital structure increases, there is a corresponding decrease in the bank's net interest margin. This outcome aligns with theoretical expectations, implying that a heavier reliance on short-term funding sources could negatively impact a bank's profitability through interest margins.

Similarly, the correlation coefficient between TDR and NIM presents a less conclusive picture. The value of -0.158 indicates a weak negative relationship, but the coefficient's statistical insignificance suggests this association is negligible. In other words, while there might be a slight tendency for higher total debt levels to correspond with lower net interest margins, this connection is statistically too weak to draw definitive conclusions. Additionally, the correlation coefficient between EQTR and NIM is 0.038, suggesting a very weak positive relationship. This implies that there is little or no association between equity ratio and net interest margin, indicating that changes in equity financing do not significantly impact the bank's interest earnings. Whereas the correlation coefficient between GR and NIM is -0.036, indicating a very weak negative relationship. This suggests that there is minimal association between gearing ratio and net interest margin, implying that changes in the level of financial leverage do not strongly affect the bank's interest earnings.

The analysis reveals weak positive correlation between Fsize and NIM (0.086) as well as AGE and NIM (0.113). These findings suggest that larger and older banks tend to have slightly higher net interest margins compared to their smaller and younger counterparts. However, the weakness of these correlations indicates that the magnitude of this effect may be limited. Lastly, the correlation coefficient between EPS and NIM is 0.157, suggesting a weak positive relationship. This implies a slight tendency for banks with higher profitability as measured by EPS to also exhibit slightly higher net interest margins.

Pre-estimation Tests

Robustness tests were performed to assess the validity of statistical inference of the chosen regression model for the study. These tests include a normality test and multicollinearity test. Overall, these pre-estimation and post-estimation tests strengthened the robustness and reliability of the statistical analysis, ensuring that the chosen regression model is appropriate for drawing meaningful conclusions from the data.

Normality Test

The normality test was conducted to confirm whether the data used in the regression model follow a normal distribution, ensuring that the normality assumption of the regression model is satisfied. A departure from normal distribution could lead to erroneous inferences. The Shapiro-Wilk normality test was employed, where a significant p-value less than 0.05 indicates a departure from normality, while a p-value greater than 0.05 suggests normal distribution. The normality test confirms that the data follows a normal distribution, which is an important assumption for regression analysis. This ensures that the inferences drawn from the regression model are valid.

Table 3: Shapiro Wilk Test (N = 100)

Variables	Statistic	Sig.
NIM	5.594	.109
STDR	2.948	.354
TDR	1.900	.890
EQTR	1.921	.448
GR	3.421	.211
Fsize	1.321	.104
AGE	1.314	.108
EPS	1.620	.302

Source: Author's Computation using SPSS.

Table 3 demonstrates that both the dependent and independent variables adhere to a normal distribution. This is evident from the fact that the p-values for all variables are greater than the required significance level of 0.05.

Multicollinearity Test

In order to detect multicollinearity among the independent variables, the Variance Inflation Factor (VIF) test was employed. VIFs are used to identify collinearity among predictors in multiple linear regression models. The decision criterion for this test is that a VIF greater than 10 and/or a tolerance value less than 0.1 would indicate the presence of harmful multicollinearity.

Table 4: Multicollinearity Test

Variable	**Tolerance**	**VIF**
STDR	.904	1.106
TDR	.901	1.110
EQTR	.460	2.172
GR	.263	3.804
Fsize	.382	2.618
AGE	.359	2.782
EPS	.618	1.617
Mean VIF		2.173

Source: Author's Computation using SPSS

The resulting mean VIF of 2.173, as shown in the table, suggests the absence of harmful multicollinearity among the explanatory variables in the study. Thus, the assumption of non-collinearity has been met. The multicollinearity test indicates that there is no strong multicollinearity among the independent variables. The VIF values are all well below 10, and the tolerance values are comfortably above 0.1, which is a positive sign for the reliability of the regression results.

Regression Analysis

This study adopted the multiple regression analysis in order to draw inference and test the hypotheses stated in chapter one. The regression result is shown on the Table 5.

Table 5: Regression Results

Variable	Coefficients	T-value	P-Value
(Constant)	5.688	3.948	.003
STDR	-0.083	-2.193	.043
TDR	-0.134	-4.359	.009
EQTR	0.021	1.201	.132
GR	-0.143	-3.306	.001
Fsize (Control)	0.213	3.112	.000
AGE (Control)	0.125	1.123	.005
EPS (Control)	0.059	0.829	.041
R^2		= 0.446	
Adj. R^2		= 0.393	
Durbin Watson		= 2.036	
F- Statistic		= 8.195	
Probability		= 0.000	

Source: Author's Computation using SPSS.

The adjusted R-squared value of 0.393 suggests that approximately 39.3% of the variation in net interest margin could be explained by the capital structure and control variables incorporated in the model. The Durbin-Watson statistic (2.036) signifies no significant autocorrelation among the residuals. Finally, the F-statistic (8.195) with a highly significant p-value (0.000) confirms the overall explanatory power of the model. The capital structure variables and control variables jointly exert a statistically significant influence on net interest margin.

Short-Term Debt Ratio and Firm Value

From the regression table, it could be observed that the coefficient of -0.083 for STDR suggests a negative relationship between short-term debt ratio and net interest margin. The significance (p-value = 0.043) indicates a statistically significant negative relationship between short-term debt and firm value, implying that an increase in short-term debt ratio would result in a decrease in net interest margin by 8.3%

Total Debt Ratio (TDR) and Firm Value

From Table 4.5, total debt ratio (TDR) has a coefficient of -0.134, a t-value of -4.359, and a p-value of 0.009 which solidify the presence of a negative relationship between a bank's overall debt level and its net interest margin. This finding further implies that a unit increase in the total debt portfolio of a bank is expected to decrease its interest earning by about 13.4%.

Equity Ratio (EQTR) and Firm Value

The regression coefficient for equity ratio according to Table 4.5 is 0.021 and its p-value (0.132). The positive coefficient (0.021) for EQTR suggests a potential positive impact on net interest margin such that an increase in equity ratio by 1% would result to a corresponding increase in net interest margin by 2%. However, the insignificance (p-value = 0.132) indicates that variations in equity ratio do not exert a statistically significant influence on net interest margin within the context of this model.

Gearing Ratio (GR) and Firm Value

The coefficient of -0.134 for GR is statistically significant (p-value = 0.001), indicating a positive relationship between a firm's debt-to-equity ratio and its net interest margin. This suggests that an increase in the gearing ratio is linked to a decrease in firm value.

Test of Hypotheses

The hypotheses formulated for this study were tested in this section using the p-values produced by the SPSS output shown in Table 4.5. The level of significance for the study is 5%. Therefore, the decision rule for this test is to reject the null hypothesis if the p-value is less than or equal to 0.050. For a p-value greater than 0.050, the null hypothesis is accepted. The hypotheses for the study are tested as follows:

H_{01}: Short-term debt ratio has no significant impact on firm value of listed deposit money banks in Nigeria

From the regression table above, it was revealed that Short-term debt ratio has a regression coefficient of -0.085 and a p-value of 0.043 which is within the acceptable statistical significance threshold of 5%. The result indicates a negative and significant effect of short-term debt on firm value of the studied banks during the period under study. Therefore, on the basis of this statistical evidence was the null hypothesis (H_{01}) rejected and it was concluded that short-term debt ratio has a significant impact on the firm value of listed deposit money banks in Nigeria**.**

H_{02}: Total debt ratio has no significant impact on firm value of listed deposit money banks in Nigeria.

Similarly, from the regression table, it was revealed that Total Debt has a regression coefficient of -0.134 and a p-value of 0.009 which is statistically significant at 5%. The result indicates a negative and significant effect of total debt ratio on net interest margin of the sampled banks, and has therefore, provided statistical evidence for us to reject the null hypothesis (H_{02}) and conclude that Total Debt has significant impact on the firm value of listed deposit money banks in Nigeria.

H_{03}:Equity ratio has no significant impact on firm value of listed deposit money banks in Nigeria.

From Table 5, it could be seen that the regression coefficient of equity ratio 0.021 and the p-value is 0.132, showing that the significance value is above the pre-selected 5% benchmark. The result indicates a positive and insignificant effect of equity ratio on the firm value of the studied banks. This finding has provided statistical evidence for the study to fail to reject the null hypothesis and conclude that equity ratio has no significant impact on the firm value of listed deposit money banks in Nigeria.

H_{04}:Total debt-to-equity (gearing) ratio has no significant impact on the firm value of listed deposit money banks in Nigeria

Finally, from the regression table, it is shown that gearing ratio has a regression coefficient of -0.143 and a p-value of 0.001 which is less than the pre-selected threshold of 5%. The result indicates a negative and significant effect of total debt ratio on net interest margin of the sampled banks, and has therefore, provided statistical evidence for the study to reject the null hypothesis (H_{04}) and conclude that Total debt-to-equity (gearing) ratio has significant impact on firm value of listed deposit money banks in Nigeria.

Discussion of Results

The regression analysis reveals a negative relationship between short-term debt and firm value, with a p-value of 0.043. This suggests that an increase in short-term debt is associated with a decrease in firm value by approximately 8.3%. This finding contradicts the assumption of the Miller and Modigliani Theory, which states that capital structure decisions are irrelevant to firm value. Instead, it aligns with the Pecking Order Theory, indicating that firms may prefer internal financing over short-term debt to avoid signaling financial distress, and thus, maintain firm value. This finding is consistent with the findings of Serwadda (2019) and Bui et al. (2023), who also found negative and significant effect of short-term debt on firm value. However, the finding contradicts the those of Kakanda et al. (2016) and Akinyomi (2016).

Similarly, the total debt ratio exhibits a negative effect on firm value, supported by a significant p-value of 0.009. This implies that an increase in the total debt portfolio of a firm is associated with a decrease in its value by about 13.4%. This finding is consistent with the Traditional Theory of capital structure, which suggests that excessive reliance on debt financing could negatively impact firm profitability and value. It also resonates with the Pecking Order Theory, as firms may prefer equity financing to debt to maintain firm value and mitigate the risks associated with high debt levels. This result is in tandem with the findings of Uremadu and Onyekachi (2018) and Kausar (2014). However, the finding is inconsistent with findings of Ajibola et al. (2018) and Anafo et al. (2015) which all found a positive effect of total debt on firm value.

The regression coefficient for equity ratio suggests a positive impact on firm value. However, the insignificance (p-value = 0.132) implies that variations in equity ratio do not exert a statistically significant influence on firm value within the context of this model. Ishaya and Abduljelee (2018) and Taani (2022) in their respective studies found a similar result. On the contrary, this result is inconsistent with the finding of Nasir (2016). While this finding does not directly align with any specific theory, it underscores the importance of considering multiple factors, including debt and equity, in determining firm value. Lastly, the negative relationship between gearing ratio and firm value, supported by a significant p-value of 0.001, suggests that an increase in the debt-to-equity ratio is associated with a decrease in firm value. This finding is consistent with the Pecking Order Theory, which posits that firms with higher debt levels may be perceived as riskier and thus have lower valuations. It also reflects the Traditional Theory of capital structure, highlighting the importance of maintaining an optimal mix of debt and equity to maximize firm value. This finding is consistent with prior findings such as Leon (2013); Cyril (2016); Ibrahim and Isiaka (2020). The result is, however, inconsistent with the findings of Nenu et al. (2017) and Adeyemi and Oboh (2011).

CONCLUSION

The findings of this study provide valuable insights into the relationship between capital structure and firm value of deposit money banks in Nigeria. Based on the findings of the regression analysis, it is evident that capital structure decisions significantly influence firm value. These findings contradict the Miller and Modigliani Theory, which posits that a firm's value is independent of its capital structure. Instead, they align more closely with the Pecking Order Theory and the Traditional Theory of Capital Structure, suggesting that firms may prefer internal financing and that there is an optimal balance of debt and equity that maximizes firm value.

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EFFECT OF AUDIT CHARACTERISTICS ON FINANCIAL REPORTING TIMELINESS OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study examined the effect of audit committee characteristics on the financial reporting timeliness of listed deposit money banks in Nigeria from 2013-2022. The specific objectives were to assess the effect of audit committee size, and audit committee meeting of listed deposit money banks in Nigeria. The study adopted ex-post facto research design while the population consists of 14 deposit money banks listed on the Nigerian Exchange Group (NGX) as at 31st December, 2022. The secondary source of data collection method was used to generate data from the annual reports and accounts of the sampled banks. Data generated from the annual reports and accounts were analyzed using descriptive statistics, correlation matrix analysis. The finding revealed that audit committee size has a negative insignificant effect on financial reporting timeliness, while audit committee meeting has a positive significant effect on financial reporting timeliness. The study recommended that deposit money banks should have a commensurate audit committee size that could monitor financial report of the banking sector. Also, the study recommended that audit committee should exercise diligence on their services to the banking industry because frequent meeting of audit committee members would lead them to strategies on how to reduce the reporting period.

Keyword: financial reporting timeliness, audit committee size, audit committee meeting.

INTRODUCTION

At the beginning of the 21st century, a wave of corporate scandals has carried away financial institute and major companies throughout the world. For instance, the incidence of Enron, WorldCom, Xerox, Cadbury Nigerian Plc, African Petroleum (now Forte Oil) Plc, and Unilever Plc among others. These scandals led to a loss of public confidence in the quality of published financial reports and the audit function globally. In response to the aforesaid corporate scandals, regulators from around the world have embarked on new reforms to strengthen the independence of the auditor and also restore public confidence in the quality of published financial reports. In the United States (US) for instance, the Sarbanes-Oxley Act was passed in 2002, which established the Public Company Accounting Oversight Board (PCAOB) to oversee the financial reporting process of public companies. Similar regulatory reforms aimed at enhancing audit quality and the quality of annual financial statements produced by public firms were also carried out in the United Kingdom (UK), Canada, Malaysia, South Africa, and Nigeria. However, despite these regulatory reforms to mitigate fraudulent financial reports, improve audit quality and by extension the quality of published accounting reports, accounting scandals and corporate failures involving highly reputable external auditors are still prevalent globally. This has attracted the attention of accounting researchers who sought to establish a possible cause and effect connection between audit committee as a committee appointed by the board of directors to assist the board in fulfilling their oversight responsibility to stakeholders and the financial reporting process, the systems of internal accounting and financial controls, the internal audit function, the annual independent audit of the institution's financial statements, the independent auditors' qualifications and independence and the legal compliance and ethics programs as established by management and the board.

Audit committee is a committee established by and amongst the board of directors of an issuer for the purpose of overseeing the accounting and financial reporting processes of the issuer and audits of the financial statements of the issuer (Sarbanes Oxley Act, 2002). Gorman (2009) posited that the Sarbanes Oxley Act Section 301 provides that each audit committee of a listed company is to be directly responsible for the appointment, compensation and oversight of the outside auditor, and the auditors are to report directly to the audit committee. Cadbury Committee Report of 1992 expressed that audit committee forms part of the governance structure of an entity and is arguably the most important and challenging sub-committee of any board of directors. Cadbury's committee report on the financial aspects of corporate governance concluded that an audit committee "has the potential to improve the quality of financial reporting by reviewing the financial statements on behalf of the board of directors".

In Nigeria, Companies and Allied Matters Act (CAMA) 2020, in Section 404(2) provides for establishment of an audit committee, while 404(3) provides for the membership of the audit committee: 3 shareholders/members and 2 non-executive/independent directors. In 2003, the Nigerian Securities and Exchange Commission (SEC) issued a code of Best Practices of Corporate Governance and this code in S. 11(a) provides for the establishment of audit committee in public companies in Nigeria. It specifies further that directors' representatives in the audit committee should mainly be Non-Executive Directors (NED) with not more than one executive member S. 12(a) SEC code (2003), (Gabriel, 2012).

The audit committee size has been designed by most of the financial regulations and various recommendations of the committees set up to find ways forward for corporate entities. Moses (2016) describes audit committee size as the sum of membership of the group chosen by the governing bodies. This figure of membership is taken as a sign of means accessible to the group. The composition of the audit committee is novel compared to developed markets where audit committees are composed of directors. The inclusion of shareholders is designed to strengthen the independence of the committee and give the shareholders direct role in monitoring the financial reporting process. The members of the committee are elected in annual general meetings of the company concerned.

Audit committee financial expertise are attributes or qualifications or experience acquired by a person before becoming a board member of a company. Previous studies support the existence of relationships between accounting expertise and the quality financial reporting (Kibiya et al., 2016)**.** Dye (2008) posited that the Code of Corporate Governance for Public Companies issued by the SEC in 2011 with amendments in 2016 and 2018 require members of the audit committee to possess financial literacy with at least one member possessing knowledge of accounting or financial management. Financially literate members are likely to ask management probing questions, understand complex accounting and reporting issues which include corporate governance disclosures and better understand external auditor.

The users of financial information usually depend on the information made available through the annual report of the companies for decision making. These annual reports are required to be reliable, credible, relevant, unambiguous and acceptable to enable potential investors, lenders and creditors to make informed decisions (Kibiya et al., 2016). Financial report is the medium through which the companies' management communicates to the interested users of financial information, and the situation of the companies being managed by them for their informed decision making. Alshrife et al. (2016) stated that financial report is a viable instrument that has relevance for all the parties that make use of financial statement for informed decision making in the corporate entities. The users are investors, creditors and other users. The fundamental objective of financial reporting is to provide useful information to users of financial statements to assist them to make decision concerning financial position, performance and changes in the financial stands of corporate and business entities.

The recent accounting scandals in the oil and gas sector, the aviation sector, banking sector as well as the consumer goods sector of the listed non-financial firms from 2013-2020 have provided reasonable and sufficient evidence from the decided cases to argue that there is negligence and lack of integrity on the part audit committees and top management officials of corporate entities. These show that accounting scandals are still being experienced in Nigeria. Is it the audit independence that is compromised, or the auditors are highly compensated or non-financial firms are not audited by the experienced auditors such as big5, or is it that audit committee of the non-financial firms' board are not really composed of non-executive directors, or the members of committee on audit are not experts in financial statements analysis, evaluation and interpretation, or the meetings frequency by members of the committee on audit is not adequate enough for scrutinising the audited financial statement of the company? Hence, the provision of answers to these raised research questions is primary to this study. Bulk of literature on audit report has been dominated by foreign literatures whose data are mostly based on foreign countries (Almagdoub, 2016; Kamolsakulchai, 2015; Lee, 2014; Madi et al., 2014; Salleh et al., 2017; Sultana et al. 2015); in Africa (Apadore & Mohd-Noor, 2013; Shukeri & Islam, 2012); in Nigeria, few studies conducted where sparse literature on this area exists (Ilaboya & Iyafekye, 2014; Usman, 2014;

Ilaboya and Iyafekhe (2014) studied corporate governance and audit report lag in Nigerian manufacturing sector from 2007 to 2011. The independent variable was proxy by board size, board independence, audit firm type, audit committee size, audit committee independence and firm size, with only audit committee size and audit committee independence as audit committee characteristics. Ahmed and Che-Ahmad (2016) studied the effects of corporate governance characteristics on audit report lag of listed banks in Nigeria from 2008 to 2012. The independent variable is proxy by audit quality, board meetings, board size, total assets, board gender, board expertise, risk committee size and audit committee size out of which only audit committee size was an audit committee characteristic. Salleh et al. (2017) studied audit committee financial expertise and audit report lag in Malaysia from 2005 to 2011. The study has only audit committee financial expertise as its independent variable. Akhor and Oseghale, (2017) studied audit committee attributes and financial reporting lag in the Nigerian banking sector from 2011 through 2015. The independent variables are audit committee independence, audit committee meetings and audit committee gender.

Financial reporting timeliness is a growing area of concern in developing countries like Nigeria. As the need to improve upon corporate practices is paramount, the study took a look at the study carried out by Akhor and Oseghale (2017) on audit committee attributes and financial reporting lag in the Nigerian banking sector from 2011 to 2015 covering a period of only five years and using banking sector again as the domain like other numerous researchers in the Nigerian literature. This is coupled with the fact that Nigeria has a significantly large capital market in sub-Saharan Africa. Therefore, this study decided to fill the gap in research and contribute to the existing literature. It is against this backdrop that this study sought to examine the effect of audit committee characteristics on financial reporting timeliness of listed deposit money banks in Nigeria from 2013 to 2022, in order to cover 10 years' period and dwell on the banking industry.

The main objective this this study is to examine the effect of audit characteristics on financial reporting timeliness of listed deposit money banks in Nigeria. The specific objectives are to:

i. Examine the effect of audits committee size on financial reporting timeliness of listed deposit money banks in Nigeria
ii. Evaluate the effect of audit committee meeting on financial reporting timeliness of listed deposit money banks in Nigeria.

In line with the objectives of the study, the following hypotheses were formulated:

H_{01} Audit committee size has no significant effect on financial reporting timeliness of listed deposit money banks in Nigeria.

H_{02} Audit committee meeting has no significant effect on financial reporting timeliness of listed deposit money banks in Nigeria.

LITERATURE REVIEW

Concept of Audit Committee

Audit committee was originally perceived by industrialists, investors, creditors, management, government representatives and the general public world over as a means of facilitating the independence and effectiveness of external auditors (Atu, 2014). But today, globally audit committee has become a fundamental phenomenon that has a principal role to play in the sustenance of corporate organizations. The role covered by audit committee before now was limited to overseeing corporate financial reporting and disclosure for public companies. But now the roles are enormous and its functions have been extended beyond public companies alone; it includes audit committee as contained in S.404 of CAMA 2020, which defined audit committee as an operating committee of the board of directors charged with oversight responsibility of financial reporting and disclosure. The committee members are drawn from the board with a chairperson selected from among the committee members.

In the United States of America, the role of audit committee continues to evolve based on the Sarbanes-Oxley Act of 2002 and involves oversight of regulatory compliance and risk management activities, overseeing the financial reporting and disclosure process, monitoring choice of accounting policies and principles, overseeing hiring, performance and independence of the external auditors, oversight of regulatory compliance, ethics, and whistleblower hotlines, monitoring the internal control process, overseeing the performance of the internal audit function and discussing risk management policies and practices with management. In Nigeria, in response to the dynamic environment, boards of directors are now placing increasing reliance on audit committees to oversee reporting and internal control (Akinsulire, 2010). Aubert (2009) observes that one mechanism that has been widely used in worldwide corporate entities to monitor the financial reporting process and corporate governance is the establishment of an audit committee comprising a majority of independent directors. Aljifri and Khasharmeh (2010) add that audit committees oversee and monitor the financial reporting process and provide advice on the appointment and disengagement of a company's external auditors. By performing these functions, the audit committee is required to ensure that the company has adequate internal controls, appropriate accounting policies, and external auditors who would deter fraud and discourage unnecessary financial reporting lag so as to promote high quality and timely financial statements in the companies. Wakaba (2014) stated that the major goal of setting audit committee in the organization is to increase the quality and questioning of board of directors.

Audit Committee Size

Audit committee size is described as a parameter which determines the effectiveness of the audit committee's ability to carry out its duties responsibly and with high level of commitment (Al-Matari et al., 2012). Al-Rassas and Kamardin (2015) stated that the audit committee size is largely dependent on how many audit committee members are employed by a firm. Moses (2016) defines audit committee size as the sum of memberships of the group chosen by the board of directors. This size of memberships is taken as a sign of means accessible to the group. The actual number of members of audit committee is particularly important as it affects the commitment of memberships to monitor management and detect their deceitful behavioural attitude. A bigger size of the audit committee could alleviate material differences throughout the tested equity submissions. A reliable and effective audit committee size result into efficient corporate financial reporting that encourages the varied stakeholders to revamp their lost hope in the growth and development of the enterprise (Moses, 2016).

Li et al. (2011) observed that the more the number of audit committee members, the less effective they become. This would lead to an ineffective audit committee that would not be able to resolve possible problems when reporting. The audit committee would be unable to render essential advice and guidance as at when due because of large number contained. Deloitte (2014) contends that the audit committee could consist of as many members as the company wishes to appoint (but at least three), but each member must meet the criteria and must be a director of the company. The audit committee may utilize advisors and obtain assistance from other persons inside and outside of the company. Elsayed (2015) states that audit committee size is the composition of not less than three (3) members and not more than six (6) members in a single listed company audit committee, and one of the members should be a financial expert and the others should be financially literate. All the members of the audit committee should possess the attributes of objectivity, confidence, integrity and informed judgment. Ojeka et al. (2015) affirm that audit committee size is the composition of three shareholders' representatives and three independent non-executive directors as contained in Nigeria's Companies and Allied Matters Act of 2020 and that one member of the audit committee should be a financial expert. This is contained in Sarbanes-Oxley (2002) and Securities and Exchange Commission Code (2011). This study agrees with the definition of Moses (2016), and this study, therefore, defines audit committee size as the number of audit committee members appointed and constituted by the board of directors to pilot the affairs of the committee for the period of assignment according to the laid down procedures.

Audit Committee Meeting

Audit committee meeting is the assembly of members of the audit committee set up and inaugurated by the board of directors of a company to deliberate on certain issues and problems in order to take decisions for the good of the company. Zabojnikova (2010) defines audit committee meeting as the number of meetings held by the audit committee members within a particular year to discuss company issues. However, it is posited that the frequency of meetings held is largely dependent on the seriousness and commitment of the audit committee on its assigned responsibilities to the company. Norwahida and Puat (2011) investigated the factors affecting the annual audit report of the 300 largest listed Malaysian companies for the year ended 2009. The results showed that the type of auditor, review opinion and performance of the company all significantly affect the audit report's delay. However, no effect was found on other factors such as board independence, the size of the audit committee, the audit committee's meetings and the qualifications of the audit committee in the audit report.

Owolabi and Dada (2011) state that audit committee meeting could be defined as the assembly of committee members who formally discuss matters of corporate importance related to the committee’s terms of reference. Madi et al. (2014) define audit committee meeting as the holding of formal discussions by the committee members with the intent to carry out the oversight roles shouldered on it by the corporate board of directors. That meeting frequency of audit committee would allow the members to express judgment about the firm’s accounting choice of principles, disclosures and estimates. In this situation, frequent meetings of audit committee would make it informed and acknowledgeable about relevant accounting and auditing issues. Bansal and Sharma (2016) refer to audit committee meeting as the convergence of members of the committee meeting which provides its members with greater opportunities for discussing and evaluating the issues related to the committee’s areas of functions placed before them pertaining to the company’s financial reporting practices. This study supports the definition of Owolabi and Dada (2011), and formulates the definition of audit committee meeting as the coming together of, or forming of quorum of members of the audit committee to formally discuss issues of relevance to the committee’s terms of reference.

Empirical Review

Audit Committee Size and Financial Reporting timeliness

Majiyebo et al. (2018) examined the effect of audit committee independence and size on the financial reporting quality of listed deposit money banks (DMBs) in Nigeria. Cross sectional data was obtained from the Nigerian Stock Exchange fact books and the financial statements of 15 listed deposit money banks over a period of ten years (2007-2016). The modified Jones (1991) model was adopted to measure financial reporting quality. The data was analyzed using STATA 13. The study revealed that audit committee independence has a negative but significant effect on financial reporting quality of listed deposit money banks in Nigeria. Also, audit committee size has no significant effect on the financial reporting quality of listed deposit money banks in Nigeria. The study concludes that audit committee independence has a negative and significant effect, while audit committee size is positive but has an insignificant effect on financial reporting quality of listed deposit money banks in Nigeria.

Warrad (2018) examined the extent of association between corporate governance characteristics and the audit report lag (ARLAG) for listed Jordanian banks during the period from 2014 to 2016. The study used statistics measurements and tools to clarify the relations and hypotheses. The results found a significant relation between corporate governance characteristics and audit report lag (ARLAG) jointly and separately with the board size (BORSIZE), board diligence (BORDEL), audit committee size (ACSIZE) and audit committee diligence (ACDEL), and the relation was controlled by two variables: return on equity (ROE) and company size (COMSIZE).

Usman (2014) investigated the impact of audit attributes on the financial reporting quality. The study employed the use of correlation research design. The sample of 15 listed food and beverages firms out of 21 that was active on the Nigerian Exchange Group (NGX) for the period of six years from 2008 to 2013 was selected. The secondary source of data from annual reports and accounts of the sampled companies was used; and the study employed the use of descriptive statistics, correlation analysis and regression analysis of data collected. The study findings showed that audit size, audit delay and audit remuneration have a significant positive impact on the quality of financial report of the sampled firms. The study also revealed that auditor rotation has no significant impact on the financial reporting quality of the sampled firms in Nigeria.

Audit Committee Meeting and Financial Reporting timeliness

Chukwu and Nwabuchi (2019) investigated the effects of the characteristics of audit committee on timeliness of corporate financial reporting in the Nigerian insurance industry. The study employed ex-post facto research design, and used secondary data extracted from the annual reports of 15 insurance firms listed on the NGX during the period 2012 to 2015. Four hypotheses were formulated and tested using the Ordinary Least Square method of multiple regressions. Results revealed a significant negative relationship between audit committee meeting frequency and timeliness of corporate financial reporting. Also, there was a negative but insignificant association between audit committee gender, as well as audit committee independence, and corporate financial reporting. Finally, the results showed that audit committee size was positively and statistically insignificantly related to timeliness in corporate financial reporting.

Akinyele and Aduwo (2019) investigated the effect of audit committee effectiveness on the timeliness of financial reporting in Nigeria using listed companies in the food and beverages industrial sector of the Nigerian economy from 2011-2015. Data collected was analyzed using both descriptive and inferential methods of statistical analysis. The study revealed that there is no significant relationship between audit committee size and timeliness of financial reporting among listed food and beverages companies in Nigeria.

Almagdoub (2016) examined the impact of audit committee characteristics on internal audit budget. The study used the data of 96 companies listed on the Bursa Malaysia for the period of three years from 2012 to 2014. The study employed the use of descriptive statistics, correlation and regression analysis. The result showed that audit committee meeting and index are significantly and positively associated with internal audit budget. The outcome also shows that audit committee tenure has a significant but negative impact on internal audit budget.

Agency Theory

The relationship between audit committee and timeliness of financial reporting are examined by agency theory. The agency theory is based on the relationship between the principal and the agent. The separation of ownership from management in modern corporations provides the context for the functioning of the agency theory. The theory of agency relationship mirrors the basic structure of a principal and an agent who are engaged in cooperative behaviour, but have differing goals and attitudes towards risk. The theory further assumes that principals, because of information asymmetry, cannot adequately observe actions that agents are taking for their benefit (Barac & Klepo, 2006). According to Stolowy and Breton (2003), if the theory of creative accounting could be constructed, it would not refer to the techniques used to manipulate, but rather to the needs, opportunities and relationships existing between categories of market participants. Davidson et al. (2005) argues that when management provides inaccurate financial reporting information, it introduces creative accounting as a type of agency cost. The agency theory provides a basis for the governance of firms through various internal and external frameworks (Roberts et al., 2005; Weir et al., 2002). The most important basis of agency theory is that the managers are usually motivated by their own personal gains and work to exploit their own personal interests rather than considering shareholders' interests and maximizing shareholder value.

METHODOLOGY

This study adopted the use of ex post facto research design. The design provides an alternative to investigate how independent variables affect dependent variables and enables the researcher observe the independent variables after the event. The population of the study comprised 10 listed deposit money banks on the NGX as at 31st December, 2022.

The study made use of secondary source of data collection during the period of the study. All the relevant data was obtained from the annual reports and accounts of the deposit money banks quoted on the NGX for the period of 10 years from 2013-2022. The data was obtained from the fact book, portal and website of the NGX for the period of the study. For the purpose of this study, the study used descriptive statistics, correlation and multiple regression analysis, considering the fact that the nature of data to be use is quantitative data.

The study made use of model specification based on multiple regression econometric models. Multiple regressions clearly explain the econometric term, the variation in the relationship between audit committee characteristics and financial reporting timeliness. The assumption is that, the dependent variable is a linear function of the independent variables. The multiple regressions with an error term (ε_{it}) are expressed in the equation below:

$$FRTL_{it}=\beta_0+\beta_1ACSIZE_{it}+\beta_2ACMEET_{it}s+\varepsilon_{it}$$

Where:

β_0 =Constant Coefficient
$\beta_1 - \beta_4$ = Explained coefficient of the independent variables
ε_{it} = Error term or disturbance term.
The presumptive signs of the parameters in the specifications are:
$\beta_1, \beta_2, \beta_3 > 0$

Table 1: Variable Definitions and Measurement

Variable	Measurement	Sources
FRLT=Financial Reporting timeliness (Dependent variable)	The period between the end of the fiscal year and the date of the audit report for the periods of 2010 to 2020.	Saqer (2015)
ACSIZE=Audit committee size (Independent variable)	Number of audit committee members.	Zabojnikova (2016)
ACMEET=Audit Committee Meeting (Independent variable)	The number of times the committee meets during the financial year end.	Adeyemi et al. (2012)

Source: Researcher compilation (2024)

RESULTS AND DISCUSSION

Table 2: Descriptive Statistics

	FRLAG	ACSIZE	ACMEET
Mean	84.82500	5.725000	3.225000
Median	82.50000	6.000000	3.000000
Maximum	192.0000	7.000000	4.000000
Minimum	49.00000	3.000000	2.000000
Std. Dev.	20.67456	0.871126	0.655551
Skewness	2.252814	-2.444814	-0.263492
Kurtosis	11.43040	7.897043	2.271549
Jarque-Bera	304.5746	159.6316	2.694513
Probability	0.000000	0.000000	0.259952
Observations	80	80	80

Source:E-views(2024)

The result shows that there is delay in the audit report of deposit money banks in Nigeria to the extent of 192 days. The implication of audit report by the companies to the extent of 192 days is that it takes almost six months to report their accounting report which is very high. This means that the companies did not comply with the minimum standard of three months in reporting of financial statement. However, other companies complied with the standard by reporting within three months after their fiscal year. This is indicated by the minimum value of 49 days. On the average, it took the companies 85 days to report their financial report. It was discovered that deposit money banks have audit committee size with a maximum of 7 which shows the numbers of the audit members on the board, while some of the banks have a minimum audit committee size of 3. The audit committee members had a meeting yearly. The result shows that the maximum meeting hold by the audit members is 4 while the minimum is 2. This is an indication that the companies had no emergency that permitted urgent meeting.

Table 3: Correlation Result

	FRTL	ACSIZE	ACMEET
FRTL	1.000000		
ACSIZE	-0.246591	1.000000	
ACMEET	0.115952	0.109721	1.000000

Source: E-views 2024

The correlation shows varying relationship between the audit characteristics and financial reporting timeliness. Audit committee size has a negative relationship with financial reporting timeliness to the extent of -0.246591 (24.7%). This indicates low correlation between the variables while audit committee meeting has a positive correlation with financial reporting timeliness to the extent of 0.115952. This indicates that audit committee size has a low correlation with the reporting period of the financial statement of listed deposit money banks in Nigeria.

Table 4: Variance Inflation Factor

Variance Inflation Factors
Date: 05/24/24 Time: 21:31
Sample: 1 80
Included observations: 80

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
ACSIZE	2.747351	53.59744	1.198049
ACMEET	0.000293	14.45174	1.554824
C	118.1464	68.75145	NA

Source: E-views (2024)

The variance inflation factor result was used to check for the collinearity between the audit committee characteristics. From the centered VIF values, it shows there is no collinearity problem since the values are below the threshold of 10.

Table 5: Hausman Specification

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.372862	4	0.1730

Source: E-views (2024)

The result of Hausman specification is used to select between fixed effect model and random effect model. Where the p-value is greater than 5%, Random is appropriate but if the p-value is Less than 5%, fixed effect is appropriate. Since the p-value (0.1730) of the result is greater than 5%, the study relied on the random model result.

Table 6: Regression Result

Dependent Variable: FRTL
Method: Panel EGLS (Cross-section random effects)
Periods included: 10
Cross-sections included: 8
Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACSIZE	-3.620956	2.381985	-1.520142	0.1327
ACMEET	0.200139	0.012053	16.60559	0.0000
C	44.5597	14.32943	3.074508	0.0029
	Effects Specification			
			S.D.	Rho
Cross-section random			11.26640	0.7199
Idiosyncratic random			7.028302	0.2801
	Weighted Statistics			
R-squared	0.847724	Mean dependent var		16.41720
Adjusted R-squared	0.839603	S.D. dependent var		17.82444
S.E. of regression	7.138618	Sum squared resid		3821.990
F-statistic	104.3819	Durbin-Watson stat		1.535348
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.559793	Mean dependent var		84.82500
Sum squared resid	14864.72	Durbin-Watson stat		0.394766

Source: E-views (2024)

The result shows that audit committee size has a negative insignificant effect on financial reporting timeliness with p-value greater than 5% level of confidence. This indicates that increase in the size of the audit members would have insignificant effect on financial reporting timeliness. This could be as a result of decision-making process during the audit reporting period. Also, audit committee meeting has a positive significant effect on financial reporting timeliness with p-value less than 5% level of confidence. Therefore, increase in audit committee meeting would increase financial reporting timeliness by 0.200139 coefficient. The audit committee characteristics explained 85% variation on financial reporting timeliness of listed deposit money banks while the remaining 15% variation is explained by other variables not included in the model. The model is fit with f-statistics less than 5% level of significance.

Discussion of Findings

Audit committee size has a negative insignificant effect on financial reporting timeliness. This indicates that increase in the size of the audit members would decrease the process of financial reporting timeliness. With this, the study accepts the hypothesis that audit committee size has no significant audit characteristics on financial reporting timeliness. The finding is in line with finding of Al-Matari et al. (2012); Usman (2014); Warrad (2018); Chukwu and Nwabuchi (2019); but is not in line with the finding of Musa et al. (2014); Moses (2016); Majiyebo et al. (2018); Akinyele and Aduwo (2019).

Also, audit committee meeting has a positive significant effect on financial reporting timeliness. Therefore, increase in audit committee meeting will increase financial reporting timeliness. This leads the study to reject the stated hypothesis that audit committee meeting has no significant effect on financial reporting timeliness of listed deposit money banks in Nigeria. This result is in line with the result of Al-Matari et al. (2012); Akinyele and Aduwo (2019), but disagrees with the result of Alshrife et al. (2016); Salehi and (2016) Chukwu and Nwabuchi (2019).

CONCLUSION AND RECOMMENDATIONS

Conclusion

From the findings, the study concludes that too many audit committee members would lead to decrease in the process of reporting. Therefore, a commensurate size that could monitor financial report of the companies is encouraged. Also, the study concludes that audit meeting has a positive effect on financial reporting timeliness. This means that frequent meeting of audit committee members leads to delay in the reporting timeliness.

Recommendations

Based on the conclusion, the study recommends that:

i. Too many audit committee members would lead to increase in the process of decision making hence, banking sector should have a commensurate audit committee size that could monitor financial report of the companies.
ii. The audit committee should exercise diligence in their services to the companies because frequent meeting of audit committee members would lead them to strategies on how to reduce the reporting period. This would also serve the interest of other stakeholders.
iii. Banking industries should ensure that internal mechanisms are put in place to accelerate audit report processes in Nigeria. Regulatory authorities should intensify the pursuit of timeliness of audit report among industries in Nigeria.

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EFFECT OF AUDIT CLIENT IMPORTANCE ON EARNINGS MANAGEMENT OF NIGERIAN QUOTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study investigates the effect of audit client importance on earnings management in Nigerian quoted deposit money banks. Earnings management involves the manipulation of financial records to present a desired image of a company's financial health, often to gain contractual benefits and incentives. The importance of banks in Nigeria's economy underscores the need for reliable financial reporting and auditing. This study examines the relationship between audit client importance measured by the client's contribution to the auditor's revenue and earnings management within Nigerian banks. Using a descriptive research design, secondary data from annual reports of selected banks from 2005 to 2022 were analyzed. The Autoregressive Distributed Lag (ARDL) model was employed to assess both short-term and long-term effects. The findings reveal that audit client importance and firm size positively impact earnings management in the short run, while profit has a negative impact. In the long run, all variables audit client importance, profit, and size positively influence earnings management, with firm size having the most significant effect. The study recommends enhancing regulatory frameworks, improving audit quality, continuous monitoring, and aligning managerial incentives with shareholder interests to mitigate earnings management practices. These measures aim to enhance the transparency and reliability of financial reporting in Nigeria's banking sector.

Keywords: Audit client importance, profit, firm size, deposit money banks, ARDL

INTRODUCTION

Earnings management is frequently linked to deliberate efforts by managers and executives to manipulate their firm's reported earnings, with the intent to mislead the owners about the company's true financial health. The main objective of this manipulation is to gain contractual benefits, incentives, and bonuses that are typically given to managers based on the profits they report. Even though these actions often adhere to accounting regulations, earnings management has contributed to the downfall of many firms worldwide (Azende, Luper, & Amos 2022).

Banks play a crucial role in fostering economic growth and development by gathering savings from surplus units and directing them towards deficit units for productive investments. Additionally, they manage the payment and settlement system and execute the government's monetary policy. Bukhtiarova, et al. (2023), views banks as the central nervous system of the economy within the financial system. To ensure efficiency and safeguard against crises, the banking sector adheres to rigorous regulations and supervision, with financial statement audits being a key mechanism for control and assurance of the safety of public funds The financial health and transparency of banks are critical to the stability of any economy. In Nigeria, the banking sector plays a vital role in economic development, acting as the intermediary for financial transactions and the channel through which monetary policies are executed. Given their importance, the integrity of financial reporting by banks is paramount. One key aspect influencing financial reporting is the relationship between auditors and their clients, particularly the significance of the client to the auditor's business, often referred to as "audit client importance."

The banking sector in Nigeria is one of the largest in Africa, characterized by numerous deposit banks which are publicly quoted on the Nigerian Exchange Group (NGX). These banks are crucial for mobilizing savings, providing credit to various sectors, and facilitating payment systems. The stability and performance of these banks have significant implications for the broader economy. Consequently, ensuring accurate and reliable financial reporting in this sector is essential.

Auditing serves as a cornerstone for credible financial reporting. It provides an independent assessment of whether financial statements are free from material misstatements, whether due to fraud or error. External auditors are tasked with examining the financial records and operations of banks to ensure compliance with accounting standards and regulatory requirements. This independent verification helps build trust among investors, regulators, and the public (Hasibuan, & Pangaribuan, 2023).

Earnings management involves the manipulation of financial records to present a desired image of a company's financial health. While some degree of earnings management is legal and involves the use of accounting discretion within the bounds of accounting standards, aggressive earnings management can border on financial misreporting or fraud. For banks, earnings management can distort the true financial position, potentially leading to misguided decisions by investors, regulatory actions, and in severe cases, financial instability.

Audit client importance refers to the extent to which a client is significant to the auditor's overall business. This importance can be measured in terms of the revenue generated from the client or the client's impact on the auditor's market reputation. High client importance can create a potential conflict of interest, as auditors might be reluctant to challenge the financial practices of a key client to avoid losing business.

In Nigeria, the issue of audit client importance is particularly pertinent due to the concentrated nature of the audit market, where a few large firms dominate the auditing of major banks. This concentration can increase the likelihood of conflicts of interest. The regulatory framework in Nigeria, while evolving, still faces challenges in enforcement and compliance, which can exacerbate the risk of earnings management practices going unchecked (Al-Begali, & Phua, 2023).

Investigating the effect of audit client importance on earnings management within Nigerian quoted deposit banks is crucial for several reasons. First, it helps understand whether auditors in Nigeria compromise their independence due to client pressure, leading to potential earnings manipulation. Second, it can provide insights into the effectiveness of regulatory measures in safeguarding audit quality and financial reporting integrity. Finally, the findings can inform policy recommendations to strengthen the audit process and enhance the transparency and reliability of financial reporting in the banking sector.

LITERATURE REVIEW

Conceptual Clarification

A client's importance is exactly proportionate to the client's performance. Client importance is defined in existing literature as a ratio of a client's sales to the sum of all clients' audited sales, as well as a ratio of the individual client's audit fees, non-audit fees, and total fees to the client's total sales (Li, 2010; Omidfar, Golestani, Einafshar & Taheri, 2013; Tyokoso, 2017). In general, a client is regarded as substantial if it contributes considerably to the firm's overall fees in terms of income. However, in this study, client importance is defined as the proportion of a client's sales to the overall client sales audited by an auditor in a given time.

Many scholars have defined the term called earnings management. Earnings management, according to Bergstresser and Philippon (2006), is a management activity geared at generating profits and reflecting the management's objectives rather than offering an accurate picture of business performance. Earnings management is described by Akers, Giacomino and Bellovary (2007) as attempts by management to manipulate or influence reported earnings by employing accounting procedures, recognising one-time non-recurring items, postponing or accelerating cost, or revenue transactions, or using other strategies aimed to impact short-term earnings.

Theoretical Framework

This study is anchored on the agency theory of Jensen and Meckling (1976). The agency theory describes the owners' delegation of authority to the managers to operate the firm on their behalf, with the owners' welfare reliant on the managers (Jensen & Meckling, 1976). Because managers' incentives may motivate them to opportunistically use business resources to suit their interests, the agency theory aims to resolve the possible conflict of interests between owners and managers (Brammer & Millington, 2008). Essentially, corporations seek to maximize shareholder wealth, which may differ from managers' interests. When the agent (managers) has more relevant knowledge than the shareholders, information asymmetry emerges, and the possibility of the agent acting in ways to further their own interest’s increases. According to agency theory, managers are driven by personal gains and endeavour to exploit their interests rather than the interests of the shareholders. Managers, for example, may be interested in purchasing expensive offices, business vehicles, and other opulent objects because the expense of these assets is paid not by them (managers), but by the owners (shareholders). The primary issue in agency theory is how to reconcile managers' competing objectives with the interests of shareholders.

Empirical Review

Bukhtiarova et al. (2023) investigated the impact of auditor’s independence on earnings management in listed deposit money banks in Nigeria. Utilizing a correlational research design, the study explores the relationships between auditors’ independence, measured by audit firm specialization, audit fee, and audit firm size, and earnings management, proxied by accrued earnings. Secondary data from the annual reports and accounts of twelve selected banks over ten years were analyzed using fixed effect estimation. The findings reveal that audit fee, audit size, and audit tenure positively influence earnings management. The positive coefficients suggest that higher audit fees, larger audit sizes, and longer audit tenures are associated with increased discretionary accruals. However, non-significant p-values caution against accepting these associations at the 5% level. The coefficient of determination indicates that the chosen variables collectively explain 27.26% of earnings management, offering some explanatory power to the model. The study recommends listed deposit money banks to prioritize engagement with Big 4 Audit Firms and carefully consider audit fee structures. Regulatory bodies, particularly the Central Bank of Nigeria, are advised to enhance surveillance, particularly in the realm of auditor remunerations.

Azende et al. (2022) determined the effect of audit client importance on earnings management of Nigerian quoted consumer goods firms. The descriptive research design approach was adopted. From 2012 to 2019, data were obtained from 13 consumer goods firms quoted on the Nigerian Exchange Group. The discretionary accrual approach was used to evaluate earnings management. Descriptive statistics and random effects regression were the main techniques used to analyse the study's data. The findings indicated that audit client importance has a negative and significant effect on the earnings management of Nigerian quoted consumer goods firms. The recommendation was that management of firms should enhance approaches that will improve their performance in terms of sales to remain important clients to their auditors.

Al-Begali and Phua (2023) characterize earnings management as any managerial action impacting reported income without providing genuine economic advantages to the organization, and may, in the long term, be detrimental. Similarly, Healy and Theresia Dwi Hastuti et al. view it as the use of managerial judgment in financial reporting and transaction structuring to manipulate financial reports, either to mislead stakeholders about the company's economic performance or influence contractual outcomes dependent on reported accounting numbers. Cook (2023) defines Earnings Management as any effort to manipulate financial accounting reports to a predetermined desired level. He associates Earnings Management with recent corporate failures and the erosion of investor confidence in financial reports and auditors. In the context of this study, Earnings Management encompasses both intentional and unintentional actions taken by managers that influence reported earnings and mislead users of accounting information. Regarding auditor independence, Manap et al. (2023) highlight it as the auditor's execution of work with a heightened level of independence and objectivity, emphasizing the ability to resist client pressures. Kallunkiet al. (2019) define audit quality as the measure of an auditor's capability to reduce noise and enhance accuracy in accounting data. Hasibuan and Pangaribuan (2023) posit auditor's independence as the likelihood that an auditor will not issue an unqualified report for statements containing errors, whether intentional or in advertent.

METHODOLOGY

A descriptive research design is adopted for this study as it allows for investigating the relationships between audit client importance and earnings management through the prediction of the behaviour of the variables. Secondary data stood as the main source of data employed by this study. Data were obtained from the published annual reports of the sampled quoted consumer goods firms in Nigeria, from 2005 to 2022. These data were both quantitative and qualitative in nature. The data were panel in nature as they had both time series (17 years) and cross-sectional (10 Commercial Banks) attributes. The population for this study consists of all the 13 deposit money banks quoted on the Nigerian Exchange (NGX) Group as of December 2022. The sample size of the study is 10 banks out of the 13 quoted deposit money banks.

Model Specification and Technique

$$MGT = f(ACI, Profit, Size) \quad (1)$$

Where; MGT = Earnings Management, ACI = Audit Client Importance, Profit = Firm profit Size = Firm size

Equation 1 above will be estimated using the following equation (2) below:

$$MGT_t = \beta_0 + \sum_{t=1}^{p} \beta_1 ACI_{t-1} + \sum_{t=1}^{p} \beta_2 \Pr ofit_{t-1} + \sum_{t=1}^{p} \beta_3 Size_{t-1} + \varepsilon_t \quad (2)$$

In order to estimate the results of this study, the ADF and PP unit root test were conducted for each series to determine the level of stationary. The ARDL techniques were adopted to analyze the objective of this study. This model analyses both long and short-run connections among variables. The ARDL long-run models were estimated as presented in the below equations:

$$\Delta \ln MGT_{\mathrm{t}} = \beta_0 + \sum_{i-1}^{m} \delta_{1i} \Delta \ln MGT_{\mathrm{t-0}} + \sum_{i-1}^{m} \delta_{2i} \Delta \ln ACI_{\mathrm{t-1}} + \sum_{i-1}^{m} \sigma_{3i} \Delta \ln \Pr ofit_{\mathrm{t-1}} + \sum_{i-1}^{m} \sigma_{4i} \Delta \ln size_{\mathrm{t-1}} + \omega_{\mathrm{t}} \quad (3)$$

Ln=Log operator. Here all variables are assigned as before Ln=Log operator.

$$\Delta \ln MGT_{\mathrm{t}} = \beta_0 + \sum_{i-1}^{m} \delta_{1i} \Delta \ln MGT_{\mathrm{t-0}} + \sum_{i-1}^{m} \delta_{2i} \Delta \ln ACI_{\mathrm{t-1}} + \sum_{i-1}^{m} \varphi_{3i} \Delta \ln \Pr ofit + \sum_{i-1}^{m} \sigma_{4i} \Delta \ln Size_{\mathrm{t-1}} + \alpha_1 \ln MGT_{\mathrm{t-0}} + \alpha_2 \ln ACI_{\mathrm{t-1}} + \alpha_3 \ln \Pr ofit_{\mathrm{t-1}} + \alpha_4 \ln Size_{\mathrm{t-1}} + \gamma_{\mathrm{t}} \quad . \quad (4)$$

where α_1 *to* α_4 = coefficients of the long-run parameters. *m* = lag order selected, γ_{t} = noise assumed to be normally distributed.

The ARDL version of the error correction model error correction term, which represents the speed at which the dependent variable returns to equilibrium after a change in the independent variables. A significant error correction term indicates that the system corrects itself quickly when deviating from the long-term equilibrium. It will look like this:

$$\Delta \ln MGT_{\mathrm{t}} = \varphi_0 + \sum_{i-1}^{m} \varphi_{1i} \Delta \ln MGT_{\mathrm{t-0}} + \sum_{i-1}^{m} \varphi_{2i} \Delta \ln ACI_{\mathrm{t-1}} + \sum_{i-1}^{m} \varphi_{3i} \Delta \ln \Pr ofit_{\mathrm{t-1}} + \sum_{i-1}^{m} \varphi_{4i} \Delta \ln Size_{\mathrm{t-1}} + \lambda lnECT_{\mathrm{t-1}} + \mu_{\mathrm{t}} \ \ldots \quad (5)$$

α_1 *to* α_4 = coefficients of the long-run parameters. *m* = lag order selected, γ_{t} = error term is assumed to be normally distributed.

Wherever: $\varphi_{1i}, \varphi_{2i}, \varphi_{3i} and \varphi_{4i}$ are the short-run active coefficients of the model's merging to equilibrium. $ECT_{\mathrm{t-1}}$ is the error adjustment term derived from the verified long-run symmetry relationship and λ is a factor indicating the rate of alteration to the equilibrium level after the impact. The estimated model is subjected to a series of diagnostic tests. Variables are defined as previously mentioned. Δ = first variance operator t = time; ln= algebraic operator; γ_t = the error period assumed to be independent and equally distributed.

RESULTS AND DISCUSSION

Table 1: ADF & PP Unit Root Test Results

Variable	ADF Stat.	Order of Integration	PP Stat.	Order of Integration
MGT	-5.785352 (-3.552973)	1(1)	-5.849533 (-3.552973)	1(1)
ACI	-6.290741 (-3.552973)	1(1)	-6.319706 (-3.552973)	1(1)
Profit	-5.611626 (-3.552973)	1(1)	-5.611419 (-3.552973)	1(1)
Size	-5.866386 (-3.552973)	1(1)	-4.668976 (-3.552973)	1(1)

Figures in parenthesis represents the critical values at the 5% level
Source: Authors E-views Output (2024).

The results from the ADF (Augmented Dickey-Fuller) and PP (Phillips-Perron) tests indicate that all the variables (MGT, ACI, Profit, Size) are integrated of order one, I(1). This means they are non-stationary at levels but become stationary after first differencing

Table 2: ARDL Bound Test Result

F-Bounds Test		**Null Hypothesis: No levels relationship**		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	3.586555	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

Source: Authors E-views Output (2024).

The ARDL Bound Test result, with an F-statistic of 3.586555, rejects the null hypothesis of no levels relationship at the 10%, 5%, 2.5%, and 1% significance levels. The critical values at different significance levels suggest that the cointegrating relationship is supported at all significance level, underscoring the reliability of the test results.

Table 3: ARDL Estimates
Short-run Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ACI)	13.35404	2.555414	5.22578	0.0002
D(Profit)	-2396604	861748.6	-2.78109	0.0156
D(Size)	1.833904	0.226497	8.09682	0.0000
CointEq	-0.053394	0.011026	-4.84257	0.0003
R-squared	0.950567			
Adjusted R-squared	0.912765			

Long-run Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACI	5.56	42.93	0.1295	0.0278
Profit	2.67	1.42	1.8803	0.0492
Size	2.7	0.89	3.0337	0.0048

Source: Authors E-views Output (2024).

The ARDL (AutoRegressive Distributed Lag) model presented in Table 4 provides both short-run and long-run estimates, which help in understanding the dynamics of the relationships between the dependent variable and the independent variables. The model reveals significant short-run effects for all variables. ACI and Size have positive short-run impacts, while Profit has a negative short-run impact. The speed of adjustment (CointEq) indicates that the system corrects itself towards the long-run equilibrium at a rate of 5.34% per period. In the long run, ACI, Profit, and Size all have positive relationships with the dependent variable, though the significance and magnitude of these effects vary. Size appears to have the most robust long-run impact. The high R-squared value (0.950567) indicates that 95.06% of the variability in the dependent variable is explained by the independent variables in the model. The Adjusted R-squared (0.912765) is also high, adjusting for the number of predictors in the model, which further supports the strong explanatory power of the model. These results can inform policy-makers and managers about the immediate and sustained effects of changes in ACI, Profit, and Size. For instance, strategies aimed at increasing Size could have both immediate and long-lasting positive effects, while changes in Profit might need careful consideration due to its short-run negative impact despite its long-run positive relationship. These findings are in line with the study of Bukhtiarova et al. (2023) investigated the impact of auditor's independence on earnings management in listed deposit money banks in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study examines the relationship between audit client importance and earnings management in Nigerian quoted deposit banks. The findings reveal significant short-run and long-run dynamics between audit client importance, profit, and firm size on earnings management. The short-run estimates indicate that audit client importance (ACI) and firm size have positive impacts on earnings management, while profit has a negative impact. In the long run, all variables (ACI, profit, and size) show positive relationships with earnings management, with firm size having the most robust impact.

The high R-squared and adjusted R-squared values indicate a strong explanatory power of the model, suggesting that the independent variables effectively explain the variability in earnings management. The significant error correction term demonstrates that the system corrects itself towards long-term equilibrium at a rate of 5.34% per period. These results underscore the importance of audit client importance and firm size in influencing earnings management practices in the banking sector.

Recommendations

This study recommends the following:

1. **Regulatory Framework Enhancement**: Regulatory bodies such as the Central Bank of Nigeria and the Financial Reporting Council should strengthen regulations to ensure transparency and accuracy in financial reporting. This includes stricter guidelines on audit practices and earnings management.
2. **Audit Quality Improvement**: Banks should engage reputable audit firms that adhere to high standards of independence and objectivity. Prioritizing engagement with Big 4 audit firms could enhance the quality of audits and reduce earnings management practices.
3. **Continuous Monitoring**: Regular monitoring and review of audit practices and financial reports are essential. This can help identify and mitigate any attempts at earnings management promptly.
4. **Training and Awareness**: Ongoing training programs for auditors and financial managers on the implications of earnings management and the importance of audit quality can help foster a culture of transparency and ethical financial reporting.
5. **Stakeholder Engagement**: Banks should engage stakeholders, including investors and regulatory bodies, to maintain trust and confidence in the financial system. Transparent communication and reporting practices can help achieve this goal.
6. **Incentive Structures**: Revising incentive structures for managers to align their interests with those of shareholders can reduce the likelihood of earnings management. Performance metrics should be designed to discourage manipulation of financial reports.

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EFFECT OF BOARD DIMENSIONS ON ENVIRONMENTAL ACCOUNTING DISCLOSURE OF LISTED OIL AND GAS COMPANIES IN NIGERIA

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Abstract
The role of accounting has expanded in recent time to incorporate disclosure about environmental, social and governance impacts. While many studies have investigated the effect of board dimensions on corporate outcomes, such as financial performance and financial reporting quality, few studies have ventured to explore the role of board dimensions on environmental disclosure. This study, therefore, bridges this important literature gap by examining the effect of board dimensions on environmental disclosure of listed oil and gas companies in Nigeria. The data were collected from the annual reports and accounts of nine (9) companies for 11 years (2013 to 2023), which were analysed using the logistic regression technique. The results indicated that both board size and board composition significantly enhance environmental disclosure. Additionally, the study finds that the inclusion of foreign directors and the frequency of board meetings significantly improve environmental disclosure. Similarly, more frequent board meetings provide regular opportunities to discuss and prioritize environmental issues, leading to more comprehensive and consistent disclosure. Based on the findings, this study recommends that oil and gas companies in Nigeria should consider increasing the size of their boards to ensure a wider range of perspectives and more robust oversight. Larger boards can better address and promote environmental disclosure through diverse inputs and comprehensive governance. In addition, oil and gas companies should strive to include members with varied expertise and backgrounds in their boards. By fostering a diverse board composition, companies can enhance their environmental disclosure practices through improved decision-making and broader insights into sustainability issues.

Keywords: Board Dimensions, Environmental Disclosure, Board Meeting, Board Composition, Foreign Directors

INTRODUCTION
Environmental accounting disclosure is undoubtedly among the most crucial matter confronting nations worldwide. This is evident in the series of conferences and summits on climate change and global warming, where leader of several countries has convened to address the issue of environmental disclosure. There is an increasing emphasis on companies to be environmentally responsible in response to the adverse effects of their actions on the atmosphere and community. Although rapid industrialization has aided economic development, it has also resulted in a rise in environmental issues around the globe. Indeed, emerging countries tend to generate large amounts of environmental pollution on a regular basis as a consequence of their industrialization (Fueta, 2020).

Several study collections have revealed concentration in developing guidelines on reporting environmental evidence. Those companies which have adopted these guide-lines tend to represent their favorable and positive information in their periodic report. But socially mindful investors seek more accurate and dependable information not only about companies' financial returns but also corporate practices that promote social justice, environmental sustainability and alternative energy/clean technology efforts. It is commonly argued that a good corporate governance is associated with increased transparency and credible disclosure to its stakeholders (Cormier et al., 2019).

Among others, Nigeria has been identified as one of those countries with a high level of environmental pollution that contributes significantly to global environmental problems. Nigeria, among others, has been recognized as a country with a high degree of environmental issues, which greatly contribute to the global environmental problems. According to the 2019 World Bank Global Gas Flaring Reduction Partnership, Nigeria is the world's seventh highest gas flaring nation. Additionally, Nigeria has the largest percentage of pollutants caused by air. These environmental problems are mostly attributed to oil companies in form of gas flaring; oil spills and environmental pollution amongst others (Obasanho, 2017) however they pay less attention to environmental issues thus many agitations by stakeholders against the companies were raised.

In Nigeria, in an attempt to tap these coffers to enhance its profitable development and well-being of the populace, the country always finds herself passing a diversity of adulterants including carbon dioxide, warming and other greenhouse emigrations. The use of natural coffers including energy is necessary to profitable development and not free from environmental consequences as traceable to the environmental declination and atmospheric pollution endured in Nigeria (Amahalu & Moedu, 2023).

In recent scholarly discourse on corporate governance, attention has increasingly turned towards examining the influence of board dimensions on environmental disclosure practices. Among the key dimensions under scrutiny, board size emerges as a fundamental variable influencing the nature and extent of environmental disclosures. Literature suggests a complex relationship wherein larger boards may afford heightened oversight mechanisms, potentially fostering comprehensive environmental reporting practices (Umoren & Ukpong, 2022). However, counterarguments caution against potential coordination challenges and diluted accountability in larger boards, raising questions about their efficacy in prioritizing environmental concerns (Sunday et al., 2019).

Furthermore, in the realm of corporate governance, gender diversity, the presence of foreign directors, and the frequency of board meetings play pivotal roles in shaping environmental disclosure practices within corporations. Gender diversity on boards introduces varied perspectives and priorities, potentially leading to heightened attention to environmental concerns and more robust disclosure practices (Rao, 2015; Onyeka & Amachulu, 2022). Similarly, the inclusion of foreign directors can bring international expertise and knowledge of regulatory standards, bolstering transparency and credibility in environmental reporting (Emmanuel et al., 2018; Modozie & Amachulu, 2022). Additionally, frequent and effective board meetings provide critical forums for discussing environmental issues and making strategic decisions, thereby ensuring that environmental considerations are adequately addressed in corporate strategies and disclosures (Juhmani, 2020; Kilincarslan et a., 2022). Collectively, these governance variables contribute to enhancing the transparency, accountability, and effectiveness of environmental disclosure practices, ultimately fostering greater sustainability within corporations operating in the oil and gas industry and beyond.

Universally, committee of nations, supranational organization, and government have also established their concern over the environment through initiating policies and rules such as the International Financial Reporting Standard Board (IFRSB) Global Reporting Initiative (GRI) and the Association of Chartered Certified Accountants (ACCA). For instance, the IFRSB has introduced Financial Reporting Standard (FRS) 10 - Presentation of Financial Statements which require firms to declare their environmental information on human activities that could have an effect to the environment. Conversely, GRI is an organization established not to make profit but to promote social, economic, environmental and sustainability through developing a framework of sustainability reporting that is widely used globally for all types of businesses, large or small.
It has currently launched its latest framework in 2021. This newly improved framework includes a harmonization with other vital global frameworks, including the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Companies (MNCs), the United Nation Global Compact Principles, and the United Nations Guiding Principles of Business and Hunan Rights. Notwithstanding the heightened interest and pressure from stakeholders; environmental reporting is still at its bottommost receding tide in Nigeria when equated with counterpart nations. Given the increasing importance of boards, it is important to identify the board dimension that make environmental disclosure more effective.

Objectives of the Study

The main objective of the study is to examine the effect of board dimensions on environmental disclosure of listed oil and gas companies in Nigeria. The specific objectives of the study are to:

i. Assess the effect of board size on environmental disclosure of listed oil and gas companies in Nigeria.
ii. Explore how board independence affects environmental disclosure of listed oil and gascompanies in Nigeria.
iii. Investigate the effect of board gender diversity on environmental disclosure of listed oil and gas companies in Nigeria.
iv. Evaluate the effect of foreign directors on environmental disclosure of listed oil and gas companies in Nigeria.
v. Assess the effect of board meeting on environmental disclosure of listed oil and gas companies in Nigeria.

Research Hypotheses

The hypotheses formulated for this study have been stated in their null forms as follows:

H_{01}: Board size has no significant effect on environmental disclosure of listed oil and gas companies in Nigeria.

H_{02}: Board independence has no significant effect on environmental disclosure of listed oil and gas companies in Nigeria.

H_{03}: Board gender diversity has no significant effect on environmental disclosure of listed oil and gas companies in Nigeria.

H_{04}: Foreign directors have no significant effect on environmental disclosure of listed oil and gas companies in Nigeria.
H_{05}: Board meeting has no significant effect on environmental disclosure of listed oil and gas companies in Nigeria.

LITERATURE REVIEW

Concept of Environmental Disclosure

There are numerous definitions of environmental disclosure. Gray (1995) perceived CER as the way of communicating the impact on the environment through the company's economic activities to stakeholders within the society. This initiative was done by companies through reporting environmental information to influence the stakeholder perception towards their business operations. Gray et al., (1995) argues that corporations use environmental reports to build themselves and their dealings with external stakeholders as they struggle to create and maintain the conditions for maximization of profit and economic growth.

Environmental reporting and disclosure practices are a means of communicating to the stakeholders about the impact of the organization's actions on the environment. Environmental disclosure is a form of corporate responsibility to the society as a result of activities which emerging a negative impact on the environment. Meanwhile, environmental disclosure is as the accountability of fulfilling the information needs of the company for investors, shareholders, customers, and other parties (Okudo & Amahalu, 2023). Environmental disclosure comprises of information relating to a corporation's activities, aspirations, and public image with regard to environmental, community, employee and consumer issues. This is an information provided for the assessment of company's behaviour towards its environment and the economic consequence of such action it provides financial and non-financial information.

Board Dimensions

It is the fiduciary duty of a company's Board of Directors to oversee the actions and decisions of corporate management. Hence, the structure of the board would affect how effectively the board fulfills this duty. Board composition has become a pertinent issue among academic researchers and business regulators (Burke et al., 2019; Hassan et al., 2020). It is simply It is the number of persons that made up the board of directors. Nigerian Code of Corporate Governance 2018 stated clearly that the board should be of sufficient size to effectively undertake and fulfil its business to oversee, monitor, direct and control the company activities and be relative to the scale and complexity of its operation. However, contrary to the requirement of Nigerian code of corporate governance, there is an opinion that larger board of directors may likely to be less effective because the larger number of people may tend to disrupt the effectiveness of communication, coordination and decision making, (Aliyu, 2018). Therefore, effective and efficient board will enhance on environmental disclosure by decreasing risk and optimism.

Thus, board size with active experts may lead to proactive managerial behavior regarding social and environmental disclosure. Larger board size can compensate for the information asymmetry because there is more exchange of idea, experiences and interaction between directors who support the process of supervision of management of company. Board size indicate the number of directors on the board of a company. The directors work for the benefit of the company and in accordance with the purpose and objectives of the company. Therefore, the larger the size of the company's directors, the more exchange of ideas, experience, support and supervision of the management of the company (Zhou & Zhu, 2017).

Board Size

It is the number of persons that made up the board of directors. Nigerian Code of Corporate Governance 2018 stated clearly that the board should be of sufficient size to effectively undertake and fulfill its business to oversee, monitor, direct and control the company activities and be relative to the scale and complexity of its operation. However, contrary to the requirement of Nigerian code of corporate governance, there is an opinion that larger board of directors may likely to be less effective because the larger number of people may end to disrupt the effectiveness of communication, coordination and decision making, (Aliyu, 2018). Therefore, effective and efficient board will enhance on environmental disclosure by decreasing risk and optimism. Thus, board size with active experts may lead to proactive managerial behaviors regarding social and environmental disclosure. Larger board size can compensate for the information asymmetry because there is more exchange of idea, experiences and interaction between directors who support the process of supervision of management of company. Board size indicate the number of directors on the board of a company. The directors work for the benefit of the company and in accordance with the purpose and objectives of the company. Therefore, the larger the size of the company's directors, the more exchange of ideas, experience, support and supervision of the management of the company (Zhou & Zhu, 2017). For the purpose of this study, board size will be measured by the total number of directors serving on the board of the sample company.

Board Independence

An independent director refers to a member of a board of directors who doesn't have a material relationship with a company and is neither part of its administrative platoon nor involved in the day- to- day operations of the company. The independent director is meant to uphold the stylishinterests of the shareholders, workers, guests, and the entire association. This director's independence means they aren't impacted by internal or external forces, and the board pulls that centered approach to reach informed opinions (Amahalu & Okudo, 2023). Board independence refers to outside directors who are independent of management and can closely track management's actions to protect shareholders' interests (Emmanuel et al., 2019).

Board Meeting

Prior studies suggest that; frequency of board meetings is credited to the number of meetings held yearly by board of directors. As indicated by (Oti et al., 2017) board meetings recurrence reflect sound checking systems. Thus, implies that, board practices if carried out the recurrence of meetings, influences the capacity of the board to scrutinize reports to reduce agency problems and improve more quality disclosures (Balasri et al., 2020). Increase scrutiny and monitory by the board, decreases agency cost and information asymmetry and invariably improve quality disclosures (Emmanuel et al., 2019). According to Conger and Lawler (1998) board meeting have a positive relationship with CER.

Board Gender Diversity

A different board means that your board members aren't homogenous when it comes to their race, race, gender, background, capacities, sexual identity, sexual exposures or indeed their ideals. Factors like age, race, gender, educational background and professional qualifications of the directors make the board less homogenous (Okudo & Okafor, 2022). A different boardroom provides a diversity of study. Each individual mind is able of offering unique ideas, results, and strategies. For boards with a further different class, the breadth of particular experience is wider and further comprehensive (Udo & Amahalu, 2022). Board gender diversity refers to the extent to which women are included in the board structure of a firm. In this study, it is operationalized as the ratio of number of female directors to total number of board members. The inclusion of women on the board has been reportedly argued to favorable contribute to solving the environmental problems that are caused by firm activities.

Foreign Directorship

Cai et al. (2014) claim that an establishment holding a wide variety of international directors will most definitely do better in environmental reporting because environmental disclosure in developed worlds is more entrenched than in developing states such as Nigeria. In developing economies such as Nigeria, which benefit from capital inflows from other countries, corporate organizations with greater foreign shareholdings may have a diverse board of directors (Beredugo & Mefor, 2018). In developed countries such as Nigeria, foreign directors are becoming increasingly prevalent due of the growth and development of multinational companies. Foreign directors are more likely to be conscious of the need for more transparent accountability for the broader environmental effect of the company due to their foreign exposure and knowledge, and therefore could be more inclined to championing and encouraging further reporting practices (Bera & Jarque, 2022). There has not been much argument in the literature concerning the relationships between foreign director’s representation on board and the strategic implementation of corporate environmental, social, and ethical responsibility.

Empirical Review

Djajadikerta (2016) studied the connection between corporate governance variables and the extent of environmental disclosure. The study focused only on mining companies listed in Indonesia Stock Exchange and employed content analysis of the annual reports. The result showed a significant positive association between board size and extent of environmental disclosure. Osazuwa et al. (2016) applied a cross-section data of sample size of 116 firms in Nigeria and provided evidence that board size positively relates to the level of environmental disclosure.

Rabi (2019) conducted a study on the relationship between board characteristic and environmental disclosure in Jordan using Agency theory to back the study. A sample of 63 listed industrial companies was study and panel data were obtained from their annual report from 2014 to 2017. The regression result revealed that board size significantly and positively affects environmental disclosure. Board independence on the other hand has insignificant effect on the level of environmental disclosure in Jordan. The study was however conducted in a country having different regulatory regime different from what is obtainable in Nigeria and also, the study considered a four-year period which can also be improved upon.

Tolulope and Eyitomi (2018) empirically studied impact of corporate diversity on corporate social environmental disclosure by employing content analysis on annual reports of seventeen (17) listed manufacturing companies in Nigeria from 2012 through 2016. Stepwise regression analysis result indicates that board size, female and foreign director have significant positive influence on corporate social environment disclosure. However, board independence appears insignificant.

Theoretical Review

The theory of voluntary disclosure was developed by Robert (1983) which elucidates the quality and quantity of corporate social and environmental disclosure and it is based on the perspective of agency theory. The stakeholder and legitimacy theories are valuable in clarifying what companies disclose in relation to environmental information but voluntary disclosure theory went a step further by illuminating on 'how much' of disclosure of environmental activities is expected (Clarkson, Li, & Richardson, 2007). Voluntary disclosure theory is a supplementary theory which elucidates the level of disclosure of corporate environmental information and endeavors to remove information irregularities between the companies, external and primary agents in the host community (Brammer & Pavelin, 2006). This study is anchored on voluntary disclosure theory as it postulates that companies with reputable environmental performance do not conceal environmental impact of their production processes and will disclose comprehensively the facts and figures on their environmental activities to various stakeholders.

METHODOLOGY

The study investigated the effects of board structures on environmental disclosure in oil and gas sector using 9 oil and gas companies as sample. The data of the study were collected from the annual reports and accounts the companies for 11 years (2013 to 2023), which were analysed using the logistic regression technique. The variables of the study were measured as presented in Table 1

Table 1: Variables Measurement

Variable Type	Indicators	Variable Symbols	Variables Measurement	Source
Independent				
	Board Size	BS	Total number of members serving on a firm's board	Ceres (2019)
	Board Independence	BI	Non-executive directors/ total directors for each firm	Abubakar and Moses (2020)
	Board Gender Diversity	BGD	Number of female board members	Naseer and Rashid (2018)
	Foreign Board Members	FBN	Proportion of foreign directors to the board	Abubakar and Moses (2020)
	Board Meeting	BM	Frequency of board meeting	Chukwuka et al. (2020)
Control				
	Company Size	CS	Natural logarithm of the firm’s year-end total assets	Akpan and Nsentip (2020)
Dependent				
	Environmental Disclosure	ENVD	Measured by dummy variable of 1 representing the presence of Environmental Disclosure in annualreports of each firm, otherwise 0	Egbunike and Okoro (2018)

RESULTS AND DISCUSSION

Descriptive Analysis

Table 2: Descriptive Analysis

Variable	Mean	Std deviation	Minimum	Maximum
ED	0.454	0.500	0	1
BS	7.626	1.694	6	14
BI	0.600	0.047	0.5	0.667
GD	0.213	0.089	0	0.5
FD	0.233	0.142	0	0.667
BM	2.818	0.861	2	4
CS	10.303	2.967	6.4	15.542

The descriptive statistics for environmental disclosure (ED), board size, and board independence, gender diversity, foreign directors and board meetings among oil and gas companies in Nigeria provide meaningful insights into corporate governance and disclosure practices within the sector. Starting with environmental disclosure, which is a binary variable, the mean value of 0.454 indicates that, on average, 45.4% of the companies engage in environmental disclosure. This percentage reveals that less than half of the companies are transparent about their environmental practices, suggesting that environmental disclosure is not yet a widespread norm in the industry. The standard deviation of 0.500, being relatively high, shows significant variability in the data, indicating a near-equal split between companies that disclose and those that do not. The minimum value of 0 and the maximum value of 1 confirm the binary nature of this variable, reflecting the presence and absence of disclosure, respectively.

The board size of these companies averages 7.626 members, with a standard deviation of 1.694. This indicates a moderate level of variability in board size across the companies. The smallest board comprises 6 members, while the largest has 14 members. This range suggests that while there is some diversity in board size, most boards tend to be relatively similar in size, typically within the 6 to 14-member range. Larger boards might bring more diverse perspectives and expertise, potentially influencing a company's decision-making processes, including those related to environmental disclosure.

Board independence, measured as the proportion of independent members on the board, has an average value of 0.600. This means that, on average, 60% of board members are independent, which is a substantial proportion, indicating a significant emphasis on having independent oversight within these companies. The standard deviation of 0.047 shows that there is low variability in this measure, suggesting that most companies have a similar level of board independence. The minimum value of 0.5 and the maximum value of 0.667 indicate that all companies in the sample maintain a considerable degree of independence, with at least half of the board members being independent.

The descriptive statistics for gender diversity among the boards of oil and gas companies in Nigeria offer valuable insights into the representation of women in these governance structures. The mean value of 0.213 indicates that, on average, 21.3% of board members are women. This suggests that while there is some presence of women on these boards, it is relatively low, reflecting a significant gender gap in board representation within the industry. The standard deviation of 0.089 reveals moderate variability around the mean, indicating that while some companies might have better gender representation, many still have low female representation on their boards.

The minimum value of 0 implies that there are companies with no women on their boards at all, highlighting a stark underrepresentation in some cases. On the other hand, the maximum value of 0.5 shows that in the best-case scenario within the sample, half of the board members are women. However, this is an outlier, as the mean indicates that most companies fall well below this level of gender diversity. These statistics suggest that gender diversity on boards is still an area needing significant improvement in the Nigerian oil and gas sector. The low mean and presence of companies with no female board members at all point to structural or cultural barriers that might be preventing better gender representation. The relatively narrow range of gender diversity (from 0 to 0.5) also indicates that even the most gender-diverse boards are not achieving parity.

On foreign directors, the mean value of 0.234 indicates that, on average, 23.4% of board members are foreign nationals. This suggests a moderate level of international representation on the boards, which can bring diverse perspectives and global best practices to the companies. The standard deviation of 0.142 reflects considerable variability in the presence of foreign directors among the companies, suggesting that while some companies have a significant proportion of foreign directors, others have few or none. The minimum value of 0 indicates that some companies do not have any foreign directors on their boards, while the maximum value of 0.667 shows that in some companies, up to 66.7% of the board members are foreign. This wide range highlights the diversity in how companies approach the inclusion of international expertise on their boards.

Turning to board meetings, the mean value of 2.818 suggests that, on average, boards meet approximately 2.82 times per year. This frequency indicates a relatively low number of board meetings, which might reflect either efficiency in governance or a potential lack of regular oversight and strategic review. The standard deviation of 0.142 shows minimal variability around the mean, suggesting that most companies hold a similar number of board meetings annually. The minimum value of 2 indicates that the least frequent board meetings occur twice a year, while the maximum value of 4 suggests that some boards meet up to four times a year. This range, though not very broad, indicates that there is some variation in the frequency of board meetings across companies.

Regarding firm size, the mean value of 10.303 indicates that, on average, the natural logarithm of the total assets of these companies is 10.303. This figure helps to normalize the distribution of firm sizes, making it easier to compare companies of different scales within the sector. The natural logarithm transformation is often used in financial analysis to reduce skewness and manage large differences in scale, providing a more interpretable metric for comparison.

The standard deviation of 2.967 reflects substantial variability in the firm sizes. This indicates that while some companies are much larger or smaller than the average, there is a significant spread in the size of companies within the sample. The minimum value of 6.4 and the maximum value of 15.542 further highlight this variability. A minimum value of 6.4 suggests the presence of relatively small firms in the industry, while a maximum value of 15.542 indicates the existence of very large firms. The range from 6.4 to 15.542 shows that the sector includes a diverse set of companies, from smaller, possibly emerging firms to large, established ones.

Regression Analysis

Table 3: Logistic Regression Analysis (Random Effect)

Variable	Coefficient	Std. Error	Z	Prob.
Constant	-55.692	19.117	-2.91	0.004
BS	2.886	1.043	2.77	0.006
BI	37.362	16.889	2.21	0.027
GD	0.037	5.272	0.01	0.995
FD	10.917	4.715	2.32	0.021
BM	3.459	1.316	2.63	0.000
CS	-0.078	0.225	-0.35	0.729
Wald chi2(6)		9.94		
Prob		0.0127		
Hausman Test Chi2		0.84		
Prob		0.9911		

Table 3 presents the regression result that tests the effect of board diversity on environmental disclosure of listed consumer goods firms in Nigeria. Overall, the results returned a wald chi2 of 9.94, which is significant at the 5% level. These suggest that the model is well fitted and the random effect analysis as adequate in explaining the modelled relationship.

The logistic regression analysis indicates a significant and positive relationship between board size and environmental disclosure among listed oil and gas companies in Nigeria. With a coefficient of 2.886 and a highly significant probability of 0.006, each additional member on the board corresponds to an increase in the likelihood of the company engaging in environmental disclosure. The moderate standard error of 1.043 suggests reasonable precision in the estimate of the board size effect, while the z-value of 2.77 underscores the statistical significance of the relationship. This finding highlights the importance of board size in influencing corporate transparency and suggests that larger boards are more likely to prioritize environmental disclosure practices.

The coefficient of 37.362 suggests a substantial positive relationship between board independence and environmental disclosure. This indicates that for each unit increase in board independence, there is a notable increase in the likelihood of the company engaging in environmental disclosure. Despite a relatively high standard error of 16.889, the z-value of 2.21 and the associated probability of 0.027 signify statistical significance, indicating that the relationship is unlikely to have occurred by chance alone. This finding underscores the importance of board independence in driving corporate transparency and suggests that companies with more independent boards are more inclined to disclose environmental information.

he coefficient of 0.037 suggests a negligible effect of gender diversity on the likelihood of environmental disclosure. This indicates that changes in gender diversity within the board have minimal impact on a company's propensity to engage in environmental disclosure practices. Additionally, the high standard error of 5.727 and the associated z-value of 0.01, along with a probability of 0.995, indicate that the relationship is not statistically significant. Consequently, the analysis does not provide evidence to support a meaningful association between gender diversity on the board and environmental disclosure practices within these companies.

The coefficient of 10.917 suggests a substantial positive relationship between the presence of foreign directors on the board and environmental disclosure. This indicates that for each additional foreign director on the board, there is a notable increase in the likelihood of the company engaging in environmental disclosure practices. Despite a moderate standard error of 4.715, the z-value of 2.32 and the associated probability of 0.021 signify statistical significance, indicating that the relationship is unlikely to have occurred by chance alone. This finding highlights the importance of international perspectives and expertise in driving corporate transparency regarding environmental matters within the Nigerian oil and gas sector.

The coefficient of 3.459 indicates a notable positive relationship between the frequency of board meetings and environmental disclosure practices. This suggests that as the number of board meetings increases, there is a corresponding increase in the likelihood of the company engaging in environmental disclosure. Despite a moderate standard error of 1.316, the z-value of 2.63 and the associated probability of 0.009 indicate statistical significance, suggesting that the observed relationship is unlikely to have occurred by chance alone. This finding underscores the importance of active board engagement and oversight in driving corporate transparency, particularly regarding environmental matters, within the Nigerian oil and gas industry.

The coefficient of -0.078 suggests a negligible effect of firm size on the likelihood of environmental disclosure. This indicates that changes in firm size have minimal impact on a company's propensity to engage in environmental disclosure practices. Moreover, the standard error of 0.225 and the associated z-value of -0.35, along with a probability of 0.729, indicate that the relationship is not statistically significant. Therefore, the analysis does not provide evidence to support a meaningful association between firm size and environmental disclosure practices within these companies.

CONCLUSION AND RECOMMENDATIONS

Conclusion

From the results of the logistic regression, this study concludes that larger board sizes have a significant positive impact on environmental disclosure. Companies with more board members tend to disclose more environmental information, possibly due to a wider range of perspectives and increased oversight capabilities. A diverse board composition, including members with varied backgrounds and expertise, significantly enhances environmental disclosure. This diversity likely fosters more comprehensive discussions and better decision-making regarding environmental practices. While gender diversity on boards shows a positive correlation with environmental disclosure, the effect is not statistically significant. This indicates that merely having women on the board does not automatically lead to better environmental reporting, suggesting the need for a more holistic approach to leveraging gender diversity. The presence of foreign directors on the board significantly improves environmental disclosure. These directors bring international experiences and best practices, which can influence the company's commitment to transparency and sustainable practices. The frequency of board meetings is significantly positively associated with environmental disclosure. Regular meetings provide more opportunities to address and prioritize environmental issues, leading to more thorough and consistent reporting.

Recommendations

Based on the findings, this study recommends as follows:

(i) Oil and gas companies in Nigeria should consider increasing the size of their boards to ensure a wider range of perspectives and more robust oversight. Larger boards can better address and promote environmental disclosure through diverse inputs and comprehensive governance.

(ii) Oil and gas companies should strive to include members with varied expertise and backgrounds in their boards. By fostering a diverse board composition, companies can enhance their environmental disclosure practices through improved decision-making and broader insights into sustainability issues.

(iii) While the mere presence of women on boards does not significantly impact environmental disclosure, companies should develop strategies to better leverage the unique perspectives and contributions of female board members. This can involve providing targeted training and ensuring women hold key positions within the board to influence environmental policies effectively.

(iv) Oil and gas companies should actively seek to include foreign directors who can bring international best practices and innovative approaches to environmental management. These directors can offer valuable insights and drive the adoption of globally recognized standards for environmental transparency and sustainability.

(v) To ensure continuous attention to environmental issues, companies should schedule regular board meetings with dedicated sessions on environmental sustainability. Frequent meetings allow for ongoing discussions and timely decision-making, thereby improving the consistency and quality of environmental disclosures.

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IMPACT OF INTERNAL ATTRIBUTES ON TARABA STATE PUBLIC TERTIARY INSTITUTIONS PERFORMANCE

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Abstract
This study examined impact of internal audit attributes on the performance of public tertiary institutions in Taraba State. The study used survey and correlational research design. The population of the study comprises of 81 staff of internal audit unit of eight out nine public tertiary institutions in Taraba State. The study employed census sampling techniques to use the entire population as sample size. Questionnaires were administered to 81 staff, however, 69 were returned from the respondents. The study employed percentage, frequencies, correlation and Tobit multiple regression to analysed the data. One of the findings revealed that internal audit experience has negative and significant effect on public tertiary institutions performance. On the other hand, internal audit independence and human capital efficiency showed positive effect on public tertiary institutions performance. The study recommends that, public tertiary institutions should re-evaluate the effectiveness of current training programmes for internal auditors. Consider incorporating innovative approaches and focusing on skills that address contemporary institutional challenges. Policy makers should foster a culture of continuous learning within the internal audit department, encouraging participation in professional development opportunities. Also, explore strategies to optimize the utilization of internal audit staff. By streamlining workflows, leveraging technology, and ensuring clear communication channels with management. Develop and implement guidelines to strengthen the independence of internal audit functions within public tertiary institutions. Encourage the adoption of best practices in internal auditing through capacity-building programs and knowledge-sharing initiatives. Mandating minimum qualifications and experience requirements for internal auditors in public tertiary institutions should also be embraced.

Keywords: Internal audit Taraba State public tertiary institutions

INTRODUCTION

Globally, organizations are primarily concerned with their performance and the attainment of their goals and objectives. Thus, every organization in the world will do whatever is ethically possible to attain and maintain excellent organizational performance in order to please the stakeholders involved with the organization. These include educational institutions particularly tertiary education institution because their performances unlike most business organizations is not measured by their profitability but by other metrics such as the academic performance of students, the job performance of employees and the corporate image or reputation of the institution (Adejola, 2019). The primary objective of tertiary educational institutions is to provide educational services to desirous members of the public (Modibo, 2018). Consequently, it is important to appreciate the fact that for tertiary educational institutions be it private or public institutions to achieve its desired objectives effectively, the management of such tertiary educational institution must establish an effective internal audit unit which would be able to furnish the management of the institutions with necessary analyses, appraisals, and recommendations for onward decision making (Dinapoli, 20017).

Consequently, internal audit constitutes a cornerstone of effective governance and performance improvement within organizations. It acts as an independent, objective assurance and consulting function, providing insights into adequacy and effectiveness of internal controls; internal audit reviews internal controls designed to safeguard assets, mitigate risks, and ensure compliance with regulations. Also considering the efficiency and effectiveness of operations such as identifies areas of improvement in processes and resource utilization, contributing to operational efficiency. More so, the objective of auditing of financial statements is to enable the auditor to express an opinion whether the financial statements are prepared, in all material respects, in accordance with an identified financial reporting framework and that the financial statements give 'a true and view' or "present fairly, in all material respects the financial results and state of affairs of the organizations (Goodwin, 2018).

Furthermore, public tertiary institutions in Taraba State face inconsistencies in internal audit practices, which potentially hinder the identification and mitigation of financial and operational risks. This inconsistency may result in inefficiencies, mismanagement, and financial irregularities. Also, there is a shortage of adequately trained and experienced internal auditors within these institutions. The deficiency in skills and expertise can lead to inadequate audit procedures and failure to detect and prevent errors or fraud. In addition, the independence of internal audit functions in public tertiary institutions is often compromised, limiting the auditors' ability to objectively assess and report on institutional performance. This lack of independence may reduce the effectiveness of audits and the reliability of their outcomes.

Additionally, studies acknowledge the general impact of internal audit on organizational performance, the nuances of how specific internal audit characteristics influence performance within public Taraba's tertiary education landscape remain underexplored. While the link between internal audit and public organizational performance is established, research exploring its impact on performance specifically in tertiary institutions in Taraba State is scarce. Therefore, this study aims to provide solution to this problem by studying the impact of internal audit attributes on public tertiary institutions performance using Taraba State tertiary institution needs special approval.

LITERATURE REVIEW

Vincent and Mutembei (2023) assessed the impact of internal audit on the financial performance of commercial banks listed on the Nairobi Securities Exchange (NSE). The study used a descriptive survey design; the target population consisted of 10 commercial banks listed on the NSE. The unit of observation included 86 respondents from various roles within these banks, such as senior finance managers, credit managers, operations managers, risk managers, and internal auditors. Both primary and secondary data were utilized in the study. Primary data on internal audit practices were collected through a semi-structured questionnaire employing a Likert-type scale, while secondary data on the financial performance of the commercial banks were obtained from their audited financial reports. The gathered questionnaire data were quantitatively analysed using SPSS software, incorporating descriptive statistics (mean and standard deviation) as well as inferential statistics, specifically regression coefficients and vicariate correlation, to examine the relationship between the dependent and independent variables. The study's findings revealed a significant relationship between internal audit, asset safeguarding, risk management, compliance with laws, and the dependent variables, which included return on assets, net income, and liquidity. These relationships were evident from the regression analysis conducted.

Maeda (2023) assessed factors affecting effectiveness of internal audit function in public institutions in Tanzania. Case of selected public sectors. The study was guided by three research objectives which were to assess the independence of auditors in the public sector's, to assess the management support to the internal audit function unit in the government organization, and to examine the salient features of accounting information system in audit performance of public sectors. The study was carried out in Dar es Salaam and Lindi regions and public institutions were selected are Muhimbili University of Health and Nachingwea District Council. Through quantitative approach purposive sampling methods was used to choose the respondents of the study from the Public Institutions.

The study applied descriptive and inferential statistics in the data analysis. In inferential analysis, data analysis was performed by using Model Fitness, Analysis of variance, Correlation Analysis and Multiple Linear Regression through the application of SPSS software. The study found out that independence of auditors does not have a significant effect on the effectiveness of internal audit functions but positive effect. In contrast, the results show that management support to internal audit functions has a significant positive and significant effect on the effectiveness of internal audit functions. This suggests that when management provides more support to the internal audit function, the effectiveness of the function tends to increase. Furthermore, the results also indicate that internal audit technology has a positive and significant effect on the effectiveness of internal audit functions. This implies that when the internal audit function uses more advanced technologies, the effectiveness of the function tends to increase.

Yaqoob et al. (2022) investigates the relationship between internal audit functions and organizational performance. The research takes ministries in the Sultanate of Oman as a case study. In order to achieve the study aims and objectives, a quantitative research approach was appropriate, thus the research uses a questionnaire method to collect data from ministries' auditors. The Questionnaire distributed to 181 auditors in several government units. The study revealed that there is a positive relationship between internal audit functions (independence, Competence, and size) and organizational performance, which is achieved through the authority and facilities given by decision-makers in government ministries.

Olagunju et al. (2023) examines the effect of internal audit on fund management in government owned universities in Osun State. The study used survey research design. Primary data was obtained through the administration of structured questionnaire to entire 110 respondents participated in the study comprising staff of internal audit and bursary departments of two selected tertiary institutions in Osun State. The data was analysed using correlation and regression methods. Findings showed that segregation of duties and integrity of auditor have a strong influence on fund management. The study also revealed that internal audit integrity has positive and significant effect on fund management in the sampled tertiary institutions. Based on the findings, the study concluded that there was a significant effect of segregation of duties and internal auditor integrity on fund management, because they are veritable tool to enhance resources management among selected public tertiary institutions in Osun state.

Nwosu et al. (2022) examined the significant role of internal auditors in effecting and promoting corporate governance in Nigeria universities. The study examined three universities namely University of Benin, Igbinedion University Okada and Delta state University. Primary data was obtained through the administration of structured questionnaire to purposively selected respondents comprising accountants and internal auditors from the three universities. A total of 150 respondent participated in the study. Data obtained was analysed using the mean frequency while the hypothesis was tested using the chi-square parametric tool. The responses from the mean analyses supports that the internal audit function (IAF) is most effective when there is an existence of an audit committee and is supported by top management, regular internal audit activities indicated that internal audit departments of the universities carry out regular audit activities.

Analysis also reveals that effectiveness and accountability on the part of internal auditors and management will enhance good governance in the institutions and facilitates fraud investigation process and improves internal processes. According to the result from the output, it was revealed that there is a significant relationship between internal audit and accountability and also a significant relationship between internal audit and performance in Nigeria universities. However, there is a weak relationship between internal audit and external audit effectiveness. The paper therefore concludes that assurance of complete independence in the work of internal auditors is essential for an excellent audit work to be performed as well as effective accountability and improvement can also be made on the performance of financial, operational and compliance audits in order to achieve good corporate governance in Nigeria universities.

Adejuwon and Hassan (2022) investigated the relationship between internal control process and organizational financial and non-financial performance of selected deposit money banks in Nigeria. With specific objectives of determining the effect of risk assessment and monitoring activities the performance of DMBs in Nigeria. Primary data was collected using questionnaires administered to top-level employees and other employees of 11 banks using a purposive random sample of 150 respondents out of which 97 responses were collected. The data were analysed using descriptive statistics, correlation analysis, exploratory factor analysis and regression.

The result of the analysis shows that risk assessment risk assessment practice has a positive impact on the performance of deposit money banks in Nigeria and that monitoring activities have a positive impact on the performance of deposit money banks in Nigeria. Each has a positive and significant impact on financial, non-financial and overall organizational performance DMBs in Nigeria. Based on the findings, it is concluded that internal control mechanism is a significant predictor of organization financial and non-financial performance and that effective internal control systems must incorporate the effects of risk assessment and control activities to enhance organizational performance of DMBs.

Martina and Mutiatu (2021) investigated the effectiveness of internal audit function of tertiary institutions in the Northern Region of Ghana. The study deployed the quantitative method of research through the use of questionnaire to collect data from a sample of 70 respondents across the tertiary institutions in the Northern Region of Ghana. The study used Chi-Square; the study revealed that there is independence of internal auditors in those tertiary institutions. Similarly, the study also revealed that professional competence is present and revered in the various tertiary institutions. Hypothetically, however, the study revealed that these two factors contribute insignificantly to the effectiveness of internal audit function. Based on the findings, its recommended that government should amend the law to decouple internal audit functions from Ministries, Departments and Agencies (MDAs) and Metropolitan, Municipal District Assemblies (MMDAs) to ensure that their promotions are not internally sanctioned, institutions to allocate sufficient budgets to enable internal auditors perform their mandatory and statutory assignments well and to also invest in the professional growth of internal auditors through sponsorship to acquire professional knowledge and skills.

Burnaby and Hass (2021) examined the effect of internal audit on performance of listed banks in Latin America and internal auditing regulations compliance. The study used multiple regressions to analyse the questionnaire administered to staff of the sampled banks. The study documented that internal audit has significant and positive effect on performance. The study reported that most listed banks in American countries especially those in the U.S and Canada unlike in Latin America complied with internal auditing regulations requiring internal auditors' independence.

METHODOLOGY

This study utilized both survey and correlational research designs. The survey design involves gathering data from staff in internal audit in Taraba State tertiary institutions through questionnaires. Conversely, the co-relational design was explored to determine the relationships between variables, such as internal audit professional competence, internal audit experience, internal audit independence and internal audit human capital efficiency and performance, without manipulation. The study use questionnaire to generate the data from 69 respondents within the internal audit units of eight public tertiary institutions in Taraba state. The study used inferential statistics to analysed the data. Inferential statistics technique includes correlation and regression analysis. Both methods were used to analyse the hypotheses formulated in the course of study which were tested using the regression analysis.

The regression model to be estimated can be expressed as follows:

$$PTI = \beta_0 + \beta_1 IAC_i + \beta_2 IAE_i + \beta_3 IAI_i + \beta_4 IAH_i + \varepsilon_i$$

Where:
$\beta_0$is the constant term (y-intercept)
β_1 to β_4 are the regression coefficients for each independent variable
PTI = Performance of tertiary institutions
IAC = Internal audit professional competence
IAE = Internal audit experience
IAI Internal audit independence
IAH = Internal audit human capital efficiency
ε represents the error term

RESULTS AND DISCUSSIONS

Descriptive Analysis

Table 1: Statements on Public Tertiary Institutions Performance

Options/Response Factors	SD	D	N	A	SA
The overall quality of research, teaching and learning at this institution has improved significantly in recent years.	5 (7)	15 (22)	10 (15)	25 (36)	14 (20)
This institution is effectively utilizing its resources to achieve its strategic goals.	24 (35)	21 (30)	11 (16)	8 (12)	5 (7)
The financial management practices at this institution are efficient and transparent.	20 (29)	14 (20)	11 (16)	14 (20)	10 (15)
The infrastructure and facilities available at this institution adequately support student learning and development.	19 (27)	24 (35)	4 (6)	11 (16)	11 (16)

Note: field survey, 2024.
SD=strongly disagreed, D=Disagreed, N=Neutral, SA=strongly agreed, A=Agreed
The figures in parenthesis are in percentage

Based on the data presented on Table 1 for each questionnaire statement, the study interprets the responses of the respondents' opinion on public tertiary institutions performance in Taraba State. 5 respondents strongly disagreed (7%), 15 respondents disagreed (22%), 10 respondents were neutral (10%), 25 respondents agreed (36%), 14 respondents strongly agreed (20%) on the subject matter of if "the overall quality of research, teaching and learning at this institution has improved significantly in recent years". The majority of respondents strongly disagreed and disagreed (56%). This implies that the overall quality of research, teaching and learning at these institutions has improved significantly in recent years. However, there is insignificant portion of respondents who either disagreed or strongly disagreed. On the other hand, the statement on if there is "This institution is effectively utilizing its resources to achieve its strategic goals.", 24 respondents strongly disagreed (35%), 21 respondents disagreed (30%), 11 respondents were neutral and disagreed (16%), 8 respondents strongly agreed (12%). The majority of respondents strongly disagreed and disagreed (65%) on the subject matter. This indicates that these institutions do not effectively utilizing their resources to achieve their strategic goals. However, a considerable number of respondents strongly agreed and agreed (19%).

Similarly, "the financial management practices at this institution are efficient and transparent." was strongly disagreed by 20 respondents (29%), 14 respondents disagreed (20%), 11 respondents were neutral (16%), 14 respondents agreed (20%) 10 respondents strongly agreed (15%). The majority of respondents strongly disagreed and disagreed (59%) that the financial management practices at this institution are efficient and transparent. However, there is a notable and significant percentage of respondents who either agreed or strongly agreed, suggesting that the financial management practices at this institution are efficient and transparent.

Table 1 present data on "the infrastructure and facilities available at this institution adequately support student learning and development." 19 respondents strongly disagreed (27%), 24 respondents disagreed (35%), 4 respondents were neutral (6%), 11 respondents agreed (16%) and strongly agreed respectively. The majority of respondents disagreed and strongly disagreed (62%) the infrastructure and facilities available at this institution adequately support student learning and development. This indicates that there is problem of facilities to support students learning and development. On this one can conclude that the available infrastructure and facilities at public institutions in Taraba state do not adequately support student learning and development.

Table 2: Statements on Internal Audit Professional Competency

Options/Response Factors	SD	D	N	A	SA
The internal audit department in this institution possesses the necessary knowledge and skills to conduct effective audits of financial and operational processes.	6 (9)	9 (13)	7 (10)	33 (48)	14 (20)
The internal audit department stays current with best practices in the field of internal auditing.	6 (9)	6 (9)	6 (9)	30 (43)	21 (30)
I am confident in the internal audit department's ability to identify and assess potential risks facing the institution.	12 (18)	21 (30)	13 (19)	18 (26)	5 (7)
The internal audit staff are proficient in using relevant audit methodologies and frameworks.	13 (19)	10 (15)	16 (23)	21 (30)	9 (13)

Note: field survey, 2024.
SD=strongly disagreed, D=Disagreed, N=Neutral, SA=strongly agreed, A=Agreed
The figures in parenthesis are in percentage

Based on the data presented in Table 2 "the internal audit department in this institution possesses the necessary knowledge and skills to conduct effective audits of financial and operational processes", the table shows that strongly disagreed are 6 respondents (9%), disagreed are 9 respondents (13%), neutral is 7 respondents (10%), agreed are 33 respondents (49%), strongly agreed are 14 respondent (20%). The percentages in parentheses represent the proportion of respondents who chose each response option out of the total number of respondents.

From this data, we can infer that a significant portion of the respondents (49%) agreed that the internal audit department in public tertiary institutions in Taraba State possesses the necessary knowledge and skills to conduct effective audits of financial and operational processes. Additionally, 20% strongly agreed with this statement, while a smaller percentage (9%) strongly disagreed. On the other hand, a combined total of 23% of respondents either disagreed (13%) or neutral (10%) that the internal audit department in these tertiary institutions possesses the necessary knowledge and skills to conduct effective audits of financial and operational processes. This data suggests that a majority of the respondents on the subject matter of if the internal audit department in these institutions possesses the necessary knowledge and skills to conduct effective audits of financial and operational processes., with a substantial number agreed and strongly agreeing with the statement.

In the second data presentation regarding the statement "the internal audit department stays current with best practices in the field of internal auditing, "the responses indicate a mixed perception among the respondents. Out of the total 69 respondents, 6 strongly disagreed (9%), similarly, 6 disagreed (9%), also 6 were neutral (9%), 30 agreed (44%), and 21 strongly agreed (30%). The majority of the respondents (74%) agreed and strongly agreed that the internal audit department stays current with best practices in the field of internal auditing. The suggest that internal audit departments are current with best practices in the field of internal auditing in order to carry out the job effectively.

In the third data presentation, which focuses on the statement "I am confident in the internal audit department's ability to identify and assess potential risks facing the institution," the responses again demonstrate a varied perspective. Out of the 69 total respondents, 12 strongly disagreed (17%), 21 disagreed (30%), 13 were neutral (19%), 18 agreed (26%), and 5 strongly agreed (7%). The largest proportion of respondents (47%) disagreed and strongly disagreed that they are not confident in the internal audit department's ability to identify and assess potential risks facing the institution. However, significant portion of the respondents are confident in the internal audit department's ability to identify and assess potential risks facing the institutions. This indicates a mixed responses which one cannot draw conclusion on the subject matter.

Finally, in the fourth data presentation related to the statement "The internal audit staff are proficient in using relevant audit methodologies and frameworks," the responses also show mixed views. Out of the 69 respondents, 13 strongly disagreed (19%), 10 disagreed (15%), 16 were neutral (23%), 21 agreed (30%), and 9 strongly agreed (13%). The highest proportion of respondents (43%) strongly agreed that the internal audit staff are proficient in using relevant audit methodologies and frameworks. Also, a significant number of individuals who perceive that the internal audit staff are not proficient in using relevant audit methodologies and frameworks. However, one can deduct that there is need for the internal audit staff to engage in training and development to be abreast with relevant audit methodologies and frameworks.

Table 3: Statements on Internal Audit Experience

Options/Response Factors	SD	D	N	A	SA
The internal audit department does not have a sufficient number of experienced staff members to handle a variety of audit engagements.	21 (30)	26 (38)	7 (10)	10 (15)	5 (7)
The average level of experience amongst internal audit staff does not allows them to efficiently complete audits.	5 (7)	11 (16)	18 (26)	21 (31)	14 (20)
The internal audit department possesses the necessary expertise to address the specific needs and challenges faced by this institution.	8 (12)	11 (16)	10 (14)	21 (30)	19 (28)
The internal audit department effectively leverages the knowledge and skills of its most experienced staff members.	7 (10)	10 (15)	12 (17)	24 (35)	16 (23)

Note: field survey, 2024.
SD=strongly disagreed, D=Disagreed, N=Neutral, SA=strongly agreed, A=Agreed
The figures in parenthesis are in percentage

For the statement "the internal audit department does not have a sufficient number of experienced staff members to handle a variety of audit engagements"21 respondents strongly disagreed (30%), 26 respondents disagreed (38%), on the other hand, 7 respondents were neutral (10%), 10 respondents agreed (15%), 5 respondents strongly agreed (7%). Based on the results the majority of respondents (68%) disagreed with the assertion that internal audit department does not have a sufficient number of experienced staff members to handle a variety of audit engagements. This indicates that the internal audit department have a sufficient number of experienced staff members to handle a variety of audit engagements. However, there is insignificant portion (22%) who either agreed or were strongly agreed.

For the statement "the average level of experience amongst internal audit staff does not allows them to efficiently complete audits", 5 respondents strongly disagreed (7%) that the average level of experience amongst internal audit staff does not allows them to efficiently complete audits, this was supported by 11 respondents disagreed (16%), 18 respondents were neutral (26%). On the other hand, 21 respondents agreed (30%) while 14 respondents strongly agreed (20%). A significant number of respondents (50%) agreed or strongly agreed that the average level of experience amongst internal audit staff does not allows them to efficiently complete audits. This suggests that on average the experience internal audit staff does not allows them to efficiently complete audits. This indicates that there is need to have more experience internal audit staff in order to enhance effectiveness of audit work in the internal audit unit. Also, the experience audit member should carry the junior staff along in the work in order to equip them with the needed knowledge.

For the statement "the internal audit department possesses the necessary expertise to address the specific needs and challenges faced by this institution", it was observed that 8 respondents strongly disagreed (12%), 11 respondents disagreed (16%), 10 respondents were neutral (15%). However, 21 respondents agreed (30%), 19 respondents strongly agreed (28%). The majority of respondents (58%) strongly agreed and agreed that the internal audit department possesses the necessary expertise to address the specific needs and challenges faced by this institution. This indicates that internal audit department has expertise who can address the specific needs and challenges faced by these institutions. However, significant number of respondents disagreed with the assertion, indicating the need for more expertise in the internal audit departments of the institutions to facilitate the ability to address needs and challenge of faced by the institutions in terms of poor management of public funds.

Similarly, the statement "the internal audit department effectively leverages the knowledge and skills of its most experienced staff members" seven respondents strongly disagreed (10%) that the internal audit department effectively leverages the knowledge and skills of its most experienced staff members. This consistent with the responses of 10 respondents who also disagreed (15%). In addition, 12 respondents were neutral (17%). However, this was opposed by 24 respondents who agreed (35%) that the internal audit department effectively leverages the knowledge and skills of its most experienced staff members and supported by 16 respondents who strongly agreed (23%). A significant number of respondents (58%) either agreed or strongly agreed that the internal audit department effectively leverages the knowledge and skills of its most experienced staff members. However, a substantial portion (25%) either disagreed or was strongly disagreed. Overall, the data indicates that while there is a general positive sentiment towards the internal audit department effectively leverages the knowledge and skills of its most experienced staff members, there are also an insignificant number of respondents who expressed disagreement or uncertainty. It suggests that there might be room for improvement in certain areas to meet the expectations and needs of the public

Table 4: Statements on Internal Audit Independence

Options/Response Factors	**SD**	**D**	**N**	**A**	**SA**
The internal audit department reports directly to the highest levels of institutional leadership (e.g., governing board, audit committee).	5 (7)	10 (15)	7 (10)	23 (33)	24 (35)
The internal audit department has unrestricted access to all relevant information and documentation needed for audits.	16 (23)	26 (38)	11 (15)	8 (12)	8 (12)
The internal audit department is not free to conduct audits without undue influence or pressure from management.	6 (9)	6 (9)	8 (11)	33 (48)	16 (23)
The internal audit department is able to objectively report its findings and recommendations, regardless of potential consequences.	21 (30)	15 (22)	10 (15)	19 (27)	4 (6)

Note: field survey, 2024.
SD=strongly disagreed, D=Disagreed, N=Neutral, SA=strongly agreed, A=Agreed
The figures in parenthesis are in percentage.

Interpreting the data presentation for each question on internal audit independence presents the data on Table 4 on aspect of the internal audit department reports directly to the highest levels of institutional leadership (e.g., governing board, audit committee), five respondents (7%) strongly disagreed while those that disagreed are 10 respondents (15%). More so respondents that are neutral are 7 respondents (10%). On the other hand, respondents that agreed that the internal audit department reports directly to the highest levels of institutional leadership (e.g., governing board, audit committee) are 23 respondents (33%). This is consistent with those that strongly agreed which are 24 respondents (34%). The data suggests that a significant majority (67%) of respondents both agreed and strongly agree that the internal audit department reports directly to the highest levels of institutional leadership (e.g., governing board, audit committee) However, a notable number of respondents (5 and 10) disagreed or strongly disagreed.

In addition to obtain data on the issue if internal audit department has unrestricted access to all relevant information and documentation needed for audits, the respondents that strongly disagreed are 16 respondents (23%), while those that disagreed are 23 respondents (38%). Other respondents choose to be neutral respect to the subject matter are 11 respondents (15%). However, out of 69 respondents 8 respondents agreed (12%) similarly, 8 respondents strongly agreed having 12% of the total respondents. The data indicates that a large majority (61%) of respondents strongly disagree and disagreed that it is internal audit department has unrestricted access to all relevant information and documentation needed for audits. However, a notable number of respondents (8 and 8) agreed or strongly agreed.

Similarly, the study obtained data on the statement on if the internal audit department is not free to conduct audits without undue influence or pressure from management,6 respondents with 9% of the total respondents both strongly disagreed and disagreed respectively. The neutral are 8 respondents (12%). On the other hand, those that agreed are 33 respondents (48%) and those that strongly agreed are 16 respondents (23%). The study indicates that more than half of the respondents (71) both agreed and strongly that the internal audit department is not free to conduct audits without undue influence or pressure from management. However, there is a significant number of respondents (6 and 6) who strongly disagreed or disagreed.

The study tried to find out if internal audit department is able to objectively report its findings and recommendations, regardless of potential consequences, through administration of questionnaires, 21 respondents (30%) strongly disagreed, which suggest that the internal audit department is unable to objectively report its findings and recommendations, regardless of potential consequences. This was supported by 15 respondents (22%) who also disagreed. The respondents that remained neutral are 10 respondents (15%). While 19 respondents (28%) agreed in line with 4 respondents that strongly agreed which represent (6%) of the total respondents. This suggests that the internal audit department is able to objectively report its findings and recommendations, regardless of potential consequences.

Table 5: Statements on Internal Audit Human Capital Efficiency

Options/Response Factors	SD	D	N	A	SA
The internal audit department is adequately staffed to effectively perform all its assigned functions.	19 (28)	29 (42)	6 (8)	10 (15)	5 (7)
The skills and qualifications of the internal audit staff are well-matched to the needs of the institution.	21 (30)	26 (38)	9 (13)	9 (13)	4 (6)
The internal audit department has the capacity to handle increased workloads without compromising audit quality.	14 (20)	6 (9)	11 (16)	26 (38)	12 (17)
The internal audit department makes efficient use of its human resources to achieve its objectives.	7 (10)	10 (15)	13 (19)	23 (33)	16 (23)

Note: field survey, 2024.
SD=Strongly disagreed, D=Disagreed, N=Neutral, SA=Strongly agreed, A=Agreed
The figures in parenthesis are in percentage

Based on the data presented on Table 5 for each questionnaire statement, the study interprets the responses “the internal audit department is adequately staffed to effectively perform all its assigned functions” 19 respondents strongly disagreed (28%), 29 respondents disagreed (42%), 6 respondents were neutral (8%), 10 respondents agreed (15%), 5 respondents strongly agreed (7%). The majority of respondents strongly disagreed and disagreed (70%). This implies that the internal audit department is not adequately staffed to effectively perform all its assigned functions. However, there is insignificant portion of respondents who either disagreed or strongly disagreed. This suggest that overall, the internal audit department is not adequately staffed to effectively perform all its assigned functions. There need to employ more qualify personnels into the internal audit departments of public tertiary institutions in Taraba State.

On the other hand, the statement on if there is "skills and qualifications of the internal audit staff are well-matched to the needs of the institution", 21 respondents strongly disagreed (30%), 26 respondents disagreed (38%), 9 respondents were neutral and disagreed (13%), 4 respondents strongly agreed (6%). The majority of respondents strongly disagreed and disagreed (68%) on the subject matter. This indicates that the skills and qualifications of the internal audit staff are not well-matched to the needs of the Taraba State public tertiary institutions. However, a considerable number of respondents strongly agreed and agreed (18%).

Similarly, “the internal audit department has the capacity to handle increased workloads without compromising audit quality" was strongly disagreed by 14 respondents (14%), 6 respondents disagreed (9%), 11 respondents were neutral (16%), 26 respondents agreed (38%) 12 respondents strongly agreed (17%). The majority of respondents strongly agreed and agreed (55%) that the internal audit department has the capacity to handle increased workloads without compromising audit quality. However, there is a notable percentage of respondents who either disagreed or strongly disagreed, suggesting that internal audit department has the capacity to handle increased workloads without compromising audit quality. However, there is need to employ more experience and qualify personnels to handle workload in internal audit departments. Table 5 present data on “internal audit department makes efficient use of its human resources to achieve its objectives”7 respondents strongly disagreed (10%), 10 respondents disagreed (15%), 13 respondents were neutral (19%), 23 respondents agreed (33%), 16 respondents strongly agreed (23%), The majority of respondents agreed and strongly agreed (56%) that internal audit department makes efficient use of its human resources to achieve its objectives.

Correlation Analysis

Table 6: Correlation matrix

Variables	PTIP	IAPC	IAEX	IAIN	IAHC	VIF
PTIP	1.0000					
IAPC	-0.0390	1.0000				1.15
IAEX	-0.1384	0.0075	1.0000			1.26
IAIN	0.3122	0.3332	-0.2316	1.0000		1.22
IAHC	0.1176	0.1721	0.3682	0.0837	1.0000	1.22

Source: STATA14 Output (2024).

Table 6 indicates that there is a positive relationship between internal audit independence, internal audit human capital efficiency and public tertiary institutions performance at value of 0.3122 and 0.1176 respectively. The positive relationship indicates that internal audit independence, internal audit human capital efficiency and public tertiary institutions performance moved in same direction. The positive relationships for suggests that as internal audit independence and internal audit human capital efficiency increases, public tertiary institutions performance will also increase. On the other hand, internal audit professional competency and internal audit experience have negative association with public tertiary performance, indicates that the two independent variables moved in separation with the dependent variable.

Tobit Multiple Regression

The study presents Tobit regression analysis on the impact of internal audit attributes on the organizational performance of public tertiary institutions in Taraba State. The analysis focused on four key internal audit attributes: professional competence, experience, independence, and human capital efficiency.

Table 7: Regression Result

Variables	Coefficient	t-value	p-value	Remark
Constants	2.4380	5.19	0.002	
IAPC	-0.1715	-2.44	0.051	negative and significant
IAEX	-0.1132	-2.21	0.018	negative and significant
IAIN	0.2983	-3.21	0.008	Positive and significant
IAHC	0.1758	1.42	0.204	Positive and insignificant
R-Square		0.1458		
Adj. R-Square		0.0925		
F-Ratio		2.73		
P-value		0.0365		

Source: STATA14 Output (2024).

Table 7 presents the coefficients and t-statistics of Tobit regression results. The results depict that the adjusted R^2 is about 0.0925, which gives the proportion, or percentage of the total variation in the dependent variable explained by the internal audit professional competence, internal audit experience, internal audit independence and internal audit human capital efficiency jointly. It signifies that 9.25% of the total variations in public tertiary institutions performance in Taraba State are caused by internal audit professional competence, internal audit experience, internal audit independence and internal audit human capital efficiency while the remaining 90.75% of the total variation in public tertiary institutions in Taraba State was caused by factors not explained by the model.

The results indicate that internal audit professional competence has a negative but statistically significant effect on organizational performance ($\beta = -0.1715$, $p = 0.051$). This implies that while institutions with highly qualified internal auditors may not necessarily experience a direct performance boost, professional competence alone might not be the most critical factor for improvement. While not directly increasing performance, strong professional competence remains a foundational requirement for effective internal audit. The study implies that internal audit professional competence decreases public tertiary institutions by 0.1715 units. The study also supports the finding of Abayomi (2015) and contracted the findings of Ewa and Udoyang (2018); James and Ibanichuka (2014).

Internal audit experience, however, shows a negative and statistically significant effect on performance ($\beta = -0.113$, $p = 0.018$). The indicates that internal audit excessive experience decrease public tertiary institution performance by 0.113 units. This suggests that while experience is valuable, a curvilinear relationship might exist. Extensive experience might lead to a decline in effectiveness due to factors like complacency or outdated approaches. Extensive experience might lead to a decline in effectiveness. The negative and significant relationship suggests that extensive experience might have a negative impact on performance. The study agreed with the finding of Wainaina (2019) and disagreed with the finding of Awdat (2021).

Internal audit independence exhibits a positive and statistically significant effect on performance (β = 0.2983, $p = 0.008$). This aligns with expectations, highlighting the importance of an independent internal audit function in ensuring objectivity and effectiveness in oversight activities, ultimately contributing to improved organizational performance. Increased independence allows for more objective oversight, ultimately improving performance. A positive and significant relationship indicates that greater independence allows the internal audit function to operate more objectively, leading to improved oversight and ultimately better organizational performance. This indicates that internal audit independence increases public tertiary institutions performance by 0.2983 units. This finding is in line with the findings of Sultana and Haque (2019); Ondieki (2020); Olagunju et al. (2023).However, contradicted the findings of Awdat (2021); Dauda (2020).

Finally, internal audit human capital efficiency demonstrates a positive and statistically significant impact on performance (β = 0.1758, $p = 0.204$). This signifies that institutions that effectively utilize their internal audit staff, potentially through optimal staffing levels, skill sets, and workload distribution, experience a positive performance influence. Effective utilization of internal audit staff leads to a positive performance impact and enhance the impact of the internal audit function. This indicates that internal audit human capital efficiency increases public tertiary institutions performance by 0.1758 units. This finding agreed with the findings of Adejuwon and Hassan (2022) while disagreed with the finding of Ezejiofor and Okolocha (2020)

CONCLUSION AND RECOMMENDATIONS

Conclusion

The results of this study offer valuable insights into the influence of internal audit attributes on the performance of public tertiary institutions in Taraba State. While internal audit professional competence appears to have significant impact, experience may have a negative influence, possibly due to a lack of fresh perspectives or adaptation to evolving challenges. The positive and significant relationship between internal audit independence and performance underscores the critical role of an independent internal audit function these institutions. This allows for objective evaluations and unbiased recommendations for improvement. This also strengthens the case for implementing robust safeguards to ensure independence and fostering a culture that values objective evaluations and constructive recommendations. Furthermore, the positive association between internal audit human capital efficiency and performance highlights the need to optimize the utilization of internal audit staff. This goes beyond simply having qualified personnel; it requires investment in training and development programs that equip internal auditors with the skills and knowledge necessary to address contemporary institutional challenges.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

(i) Public tertiary institutions should re-evaluate the effectiveness of current training programs for internal auditors. Consider incorporating innovative approaches and focusing on skills that address contemporary institutional challenges.

(ii) Policy makers should foster a culture of continuous learning within the internal audit department, encouraging participation in professional development opportunities. Also, explore strategies to optimize the utilization of internal audit staff. This may involve streamlining workflows, leveraging technology, and ensuring clear communication channels with management.

(iii) Policy makers of public tertiary institutions should develop and implement guidelines to strengthen the independence of internal audit functions within public tertiary institutions. Encourage the adoption of best practices in internal auditing through capacity-building programs and knowledge-sharing initiatives. Also, consider mandating minimum qualifications and experience requirements for internal auditors in public tertiary institutions.

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EFFECT OF CORPORATE SUSTAINABILITY ON MARKET PERFORMANCE OF LISTED COMPANIES OPERATING IN NIGERIAN MANUFACTURING SECTOR.

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Abstract
This study was anchored on the effects of corporate sustainability on market performance of list companies operating in Nigerian Manufacturing Sector. Annual panel data source from 44 manufacturing firms between 2014-2023 were utilized for the study. Panel corrected standard errors (PCSEs) regression was adopted for the model. The findings from the regression analysis revealed that there is a positive and significant influence between Environmental sustainability and Tobins' Q ratio (β = 0.01298, p = 0.001), but possesses positive and insignificant influence on price earnings ratio (β = 0.00049, p = 0.956). Social sustainability demonstrated a positive and insignificant effect on Tobins' Q ratio (β = 0.00458, p = 0.522). Conversely, social sustainability showed a negative and insignificant relationship with price earnings ratio (β = -0.000228, p = 0.986). It also revealed that governance sustainability reporting has a positive and statistically insignificant effect on the Tobins' Q but possesses a statistically significant positive relationship with price earnings ratio with a coefficient of 0.05540 and a p-value of 0.001 of manufacturing firms in Nigeria during the study period. Firm size exhibited a positive and significant relationship with the price earnings ratio and Tobins' Q (β = 0.06023, p = 0.001). The study concludes that the impact of corporate sustainability on market performance is evident but modest, as indicated by the relatively low R-squared values (R^2 = 0.0395 and 0.1242, p = 0.0001). It was recommended that companies should focus on implementing green technologies by investing in energy-efficient technologies and sustainable production processes.

KEYWORDS: *C*orporate Sustainability, Tobins'Q, Price Earnings Ratio, firm size, firm age

INTRODUCTION

Corporate entities are generally assumed to operate on a going-concern basis, implying their perpetual existence without anticipation of winding-up. This assumption is heavily reliant on their sustainability reporting index (SRI), which is pivotal in determining their survival, growth, and overall performance (Qadorah, 2019). The SRI encompasses various indices—economic, social, governance, and environmental—that companies must disclose to ensure their continued existence and success. These indices serve as metrics for evaluating a company's performance over time (Qadorah, 2019).

The significance of corporate sustainability extends beyond mere compliance or reporting requirements, highlighting a broader commitment to responsible business conduct aligned with ethical principles and societal expectations (Qadorah, 2019). Sustaining environmental, social, and governance performance is essential for navigating the complexities of the modern business landscape successfully. Market performance metrics, including asset management, profitability, leverage, liquidity, and market value, serve as vital indicators of a company's economic health, competitive position, and long-term viability (Hardiningsih et al., 2020; Ibrahim et al., 2021). Tobin's Q ratio, for instance, assesses a company's market value and predicts future profitability trends (Hardiningsih et al., 2020).

The multifaceted evaluation of market performance is critical for distinguishing companies and identifying areas for improvement (Onyekwelu et al., 2017). This involves analyzing factors such as company size, value, profitability, structure, leverage, and liquidity to establish and sustain a competitive advantage in the global business landscape (Onyekwelu et al., 2017). In developing economies like Nigeria, where markets are highly competitive and rapidly evolving, companies face heightened pressure to not only succeed but also sustain their success over time (Alshehhi et al., 2018).

The adoption of sustainable practices, as exemplified by corporate sustainability, is recognized as a strategic imperative for achieving long-term success (Evans et al., 2017). By incorporating environmental, social and governance considerations into their business strategies, companies can meet present needs and ensure the well-being of future generations (Ismail et al., 2021).

Research indicates a positive correlation between corporate sustainability initiatives and financial performance (Eccles & Serafeim, 2013; Ioannou & Serafeim, 2017). Nevertheless, the specific implications of these practices on market performance in the Nigerian context remain underexplored. This study aims to fill this gap by examining the effects of corporate sustainability on the market performance of listed manufacturing firms in Nigeria. It explores multiple variables of corporate sustainability, combining sustainability reporting index (SRI) with environmental, social, and governance practices to explain market performance variables such as Price-Earnings Ratio and Tobin's Q Ratio. This study aims to provide policymakers with a clearer understanding of the impact of sustainability practices on market performance, ultimately enhancing corporate strategies and sustainable development in Nigeria. In light of the foregoing the following research questions are raised:

i. What is the extent of the effects of environmental sustainability reporting on Market Performance of listed companies operating in Nigerian manufacturing sector?
ii. What is effect of social sustainability reporting on Market Performance of listed companies operating in Nigerian manufacturing sector?
iii. What is effect of governance sustainability reporting on Market Performance of Listed Companies Operating in Nigerian Manufacturing Sector?
iv. What is the overall impact of corporate sustainability reporting on the market performance of listed companies operating in the Nigerian manufacturing sector?

LITERATURE REVIEW

Corporate Sustainability

Corporate sustainability is a multifaceted concept that includes the structures, mechanisms, and indicators necessary for a firm's long-term existence. It involves financial and non-financial aspects, such as social and environmental activities, which are essential for sustainable growth (Evana, 2017). Sustainability reporting provides stakeholders with comprehensive information about a company's performance in tangible aspects (Gould as cited in Anumaka, 2023).

According to Shehu (2012), corporate sustainability encompasses elements like ownership structure, diversification level, financial leverage, firm size, firm age, board structures, profitability, and liquidity (Lang & Lundholm, 1993). Other components of corporate sustainability as adopted in this study are defined as follows:

Environmental Sustainability: Environmental sustainability involves strategies to minimize ecological impact and preserve natural resources. It includes efforts to control emissions, reduce pollutants, and implement eco-friendly practices (Omaliko et al., 2020; Ijeoma, 2015). In Nigeria, compliance with environmental laws is essential for safeguarding the environment and enhancing firm performance (Bahta et al., 2021; Ren & Hussain, 2022). Sustainable practices not only enhance performance but also contribute to environmental preservation (Qalati et al., 2023).

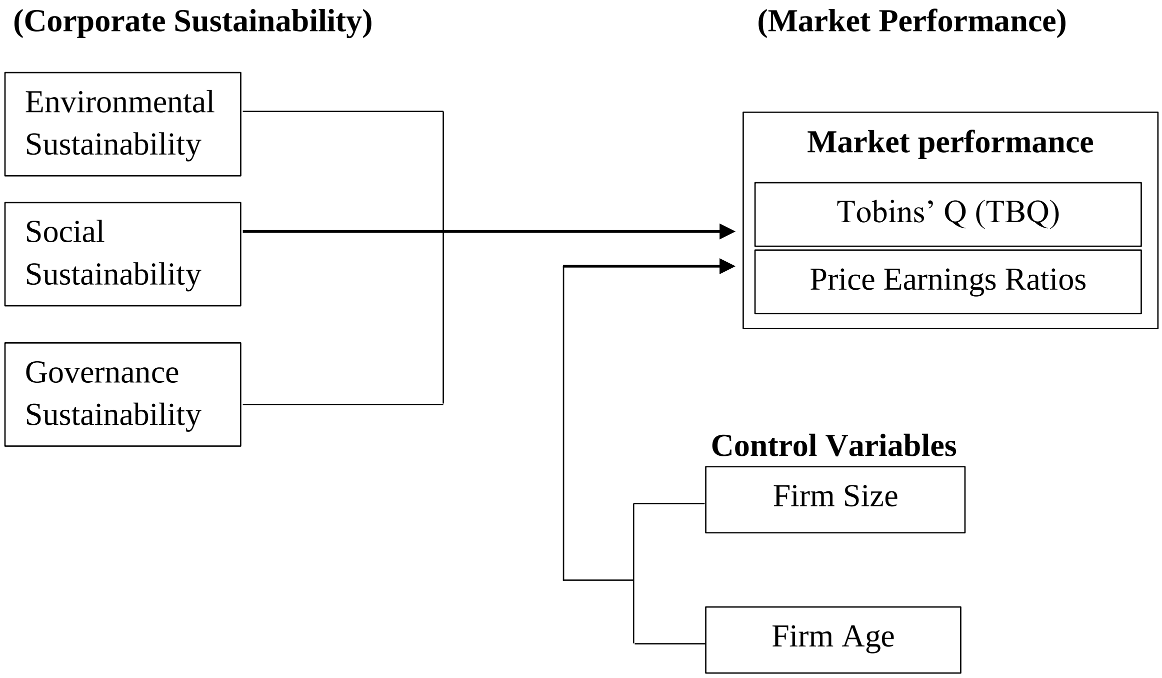
Social Sustainability: Social sustainability covers a company's impact on its stakeholders and the community. It includes corporate social responsibility (CSR), labor rights, and community growth (GRI, 2011; Ebimobowei, 2011). CSR represents companies' voluntary contributions to society beyond legal requirements (Davis, 1973; Marrewijk, 2003). Social sustainability quantifies the social costs and benefits of a company's operations, emphasizing the importance of internal and external stakeholder engagement (Caesaria & Basuki, 2017).

Governance Sustainability: Governance sustainability involves the policies, procedures, and processes that guide and manage a company (Aggarwal, 2013). It includes rules to resolve conflicts between stakeholders and management, ensuring accountability and efficient resource utilization (Ebimobowei, 2011). Good governance structures reduce agency problems and enhance market performance (Agarwal & Gort, 2002). Governance sustainability also addresses socio-political issues affecting companies globally.

Concept of Market Performance

Market performance is a dynamic concept defined by financial and non-financial indicators that measure the extent of achievement of market share or results (Mirza & Javed, 2013). It differs from financial performance, focusing on reputation, market share, and stakeholder perceptions (Aifuwa, 2020). Market performance includes metrics like market share, price per share, product quality, and marketing effectiveness (Ivanov & Avasilcăi, 2014). It is measured using various approaches depending on the user and circumstances (Brey & Haavaldsen, 2014), primarily as market-based measures such as stock price, dividend payout, and earnings per share.

Conceptual Model



Source: Conceptual Model Developed by the Researcher (2023)

Theoretical Framework

For this study, three financial reporting theories are adopted: agency theory, legitimacy theory, and stakeholders' theory. These theories explore the relationship between a company and its owners. Agency theory, developed by Jensen and Meckling (1976), highlights the principal-agent relationship, emphasizing that shareholders (principals) entrust managers (agents) to run the firm on their behalf. However, managers may pursue personal interests at the expense of shareholders' wealth. Effective corporate governance mechanisms, such as a well-structured board of directors, are essential to align management's interests with those of shareholders and enhance market performance.

Legitimacy theory, proposed by Dowling and Pfiffer (1975), asserts that organizations must operate within societal norms and values to be perceived as legitimate. This theory is crucial for corporate sustainability, emphasizing that companies must align their practices with societal expectations, including economic, environmental, and social considerations. In the context of Nigerian manufacturing sectors, adhering to societal norms and values enhances a company's legitimacy and sustainability, impacting its long-term viability and market performance.

Stakeholder theory, introduced by Freeman (1984), posits that businesses rely on stakeholders for success and must serve broader societal interests beyond economic value creation for shareholders. This theory underscores the importance of managing relationships with key stakeholders, such as employees, customers, suppliers, and communities, to create intangible assets that drive competitive advantage. In the Nigerian manufacturing sector, stakeholder theory provides a framework for understanding how companies fulfill their responsibilities to stakeholders, influencing corporate sustainability and market performance. Integrating these theories offers a comprehensive approach to examining the effects of corporate sustainability on market performance in Nigerian manufacturing firms.

Empirical Review

Ubandawaki (2024) studied the Impact of Environmental, Social, and Governance Disclosure on Firm Performance: A Case of Listed Manufacturing Firms in Nigeria. The study collected data from annual and standalone sustainability reports of companies of listed manufacturing firms in Nigeria. The Pooled-corrected standard error and the Generalized Least Square regression analysis employed on 400 firm-year observations indicates that governance disclosure affect market performance measured by Tobin's Q. The study is however has limited focus on the specific impact of governance disclosure within the broader context of ESG reporting on market performance in listed manufacturing firms in Nigeria. This study filled this gap by conducting a detailed investigation into the relationship between environmental, social, and governance (ESG) disclosure, with a specific emphasis on governance, and firm performance in the Nigerian manufacturing sector.

Okechukwu and Ugwu (2023) conducted a study on the Influence of Corporate Sustainability on Firm Performance in Nigeria (2011-2020). The study employed an ex-post facto research design, utilizing past data in the form of secondary data to examine the influence of corporate sustainability on firm performance. The key findings revealed that environmental sustainability exhibited a probability value of -0.124495, suggesting that it did not have a significant impact on the annual profit of the selected firms in Nigeria. However, the study has a limited scope as it only analyzes the selected high sustainability firms and finds that environmental sustainability has no significant impact on profit. This study filled the gap by conducting a comprehensive analysis of the relationship between corporate sustainability, including environmental, social, and governance aspects, and market performance among listed companies in the Nigerian manufacturing sector.

Hardiningsih et al. (2020) conducted research on the impact of Sustainability Information Disclosure on the market performance, drawing empirical evidence from Indonesia and Malaysia. The study utilized purposive sampling to select 21 mining sector companies in Indonesia and 18 companies in Malaysia. Regression analysis using WarpPLS was employed to assess the proposed hypotheses. The findings indicated a significant influence of environmental disclosure on various financial indicators, including return on assets, return on equity, price-earnings ratio, and Tobin's Q, in both Indonesia and Malaysia. While it explored the relationship between environmental disclosure and market performance, it does not address the broader concept of corporate sustainability or consider other sustainability dimensions. This study filled the gap by investigating the effects of corporate sustainability, including environmental, social, and governance dimensions, on the market performance of listed companies operating in the Nigerian manufacturing sector.

Wahua and Ezeilo (2021) studied effects of environmental, social and governance imperatives on the performance of selected listed mortgage banks in Nigeria. Multivariate analysis of covariance (MANCOVA) was used in testing the three key hypotheses formulated with the aid of statistical package for social sciences (SPSS). The study established that governance imperatives have significant positive impact on the performance of sampled banks within the period studied. Wahua and Ezeilo (2021) focused on the performance impact of ESG imperatives on mortgage banks using data from 2015 to 2020 but did not explore the manufacturing sector. This study filled this gap by examining the effect of corporate sustainability on market performance specifically within the Nigerian manufacturing sector over a longer period from 2014 to 2023.

METHODOLOGY

The study adopted ex-post factor research design in order to examine the impact of corporate sustainability on market performance of listed manufacturing companies in Nigeria by observing the variation in corporate sustainability that may lead to a change in market performance. Data were obtained from annual report and account of the sampled companies as well as the fact book of Nigerian Stock Exchange for the period of 10 years (2014 to 2023). The population of this study comprised of all the manufacturing companies listed on the Nigerian Stock Exchange (NSE) as at 31st December, 2023. There are fifty-eight (58) manufacturing companies listed on NSE as at 31st, December, 2023. This study employed stratified sampling technique where all members of the population are to be considered but due to some limitation the following filters are applied. i. Companies must be listed on or before 2014 because the time scope of the study is from 2014 to 2023. ii. Companies must have complete data for the study period thus; forty-four (44) companies met the requirements and are the sample size of the study.

Study Variables and Measurement

The means by which the various variables adopted in this study are measured or computed are as follows:

Dependent Variables (Market Performance)

Tobin's Q: It was measured by the ratio of a company's asset market value to its replacement cost, calculated as (Market Value of all outstanding shares + Debt) / Total Assets as previously adopted by Wibowo (2014), and Fiakas (2005).

Price Earnings Ratio (PER): It is measured by the ratio of a company's current share price to its earnings per share (EPS), measured as Stock price / Earnings per share as adopted by Razaaq (2019), Wibowo et al. (2019).

Independent Variables (Corporate Sustainability)

Environmental Sustainability Index: It was measured by company's expenditure on environment as adopted previously by Hardiningsih et al. (2019), Okechukwu and Ugwu (2023).

Social Sustainability Index: It was measured by the amount spent by companies on staff training and development as adopted by Okechukwu and Ugwu (2023).

Governance Sustainability Index: the measurement for governance sustainability in this study was adopted from Wahua (2015), Wahua and Ezeilo (2021) as Annual shareholders' fund of a company.

Control Variables

Firm Size: it was measured by taking the logarithm of total assets of the company as adopted by Aras et al. (2010), Krishnan (2012), Aile & Bausys (2013), Cho & Park (2015).

Firm Age: was measured by the Year of Financial Report - Year of incorporation as adopted by Cheng & Shiu (2012), Adegbite et al. (2018), Samosir (2018).

Model Specification

The model for this variable estimated the effect of corporate sustainability index on market performance as presented below:

Model 1

$$TBQ_{it} = \beta_0 + \beta_1 ENSI_{it} + \beta_2 SSI_{it} + \beta_3 GSI_{it} + \beta_4 FSZ_{it} + \beta_5 FAG_{it} + \varepsilon_{it} \quad \text{(i)}$$

Model 2

$$PER_{it} = \beta_0 + \beta_1 ENSI_{it} + \beta_2 SSI_{it} + \beta_3 GSI_{it} + \beta_4 FSZ_{it} + \beta_5 FAG_{it} + \varepsilon_{it} \quad \text{(ii)}$$

Where:
TBQ = represents Tobins' Q Ratio,
PER: Price Earnings Ratio
ENSI = denotes Environmental Sustainability Index,
SSI = denotes Social Sustainability Index,
GSI = denotes Governance sustainability Index,
FSZ = denotes Firm Size (as a control variable),
FAG = denotes Firm Age (as a control variable),
β_o = Constant term or the intercept
$\alpha_0, \alpha_1, \alpha_2..., \alpha_6$ and $\beta_1, \beta_2..., \beta_6$ = are the coefficients to be estimated, and

e= is the error term.
i = represents the number of firms in the panel data i.e. 1-51 manufacturing firms in Nigeria
't' = the time period of the study (2014 – 2023).

RESULTS AND DISCUSSION

This section presents the results of the analysis of the collected data from the annual report and accounts of the sampled manufacturing companies in Nigeria. The descriptive statistics, correlation and regression analysis are presented below.

Diagnostic Test of Independent and Dependent Variables

The study conducted several statistical tests to ensure the robustness of the regression models used for analyzing Tobin's Q and Price Earnings Ratio in relation to corporate sustainability variables.

The variance inflation factor (VIF) was used to assess multicollinearity among independent variables. None of the variables exceeded the critical threshold of 10.00 for VIF, indicating no significant multicollinearity issues.

The link test based on Tukey (1949) and Pregibon (1980) was employed to test for model specification. The results showed that both Tobin's Q and Price Earnings Ratio models were correctly specified, as indicated by non-significant p-values (_hatsq > 0.05).

Heteroskedasticity was tested for both models. Model one (TBQ) did not reject the null hypothesis of constant variance, suggesting homogeneity of variance. However, model two

(PER) exhibited heteroskedasticity, necessitating the use of Panel Corrected Standard Errors (PCSE) in the final regression to address this issue.

Table 1: Diagnostic Test

Model	Multicollinearity VIF test	Heteroskadasticity test	Link test (_hatsq)
1	1.25	0.0001	0.627
2	1.25	0.5156	0.109

Source: STATA Version 14.2 Output

Descriptive Statistics

Table 4.2 presents descriptive statistics for the dependent, independent, and control variables across the 44 sampled manufacturing firms, totaling 440 observations. Market performance, represented by Tobin's Q (TBQ) and Price Earnings Ratio (PER), averaged 0.4391 kobo and N 0.8199 kobo, respectively, over the review period. The values ranged from a minimum of 0.225 and -0.2603 to a maximum of 2.909 and 2.1353 kobo, reflecting significant variability.

Environmental and social sustainability performance had average values of 7.4130 and 7.489, respectively. Both metrics had a minimum value of 0, indicating that some firms did not report any environmental or social sustainability activities. The maximum values reached 11.414 for environmental sustainability and 10.079 for social sustainability, showcasing the range of performance among the sampled companies. For governance sustainability, the minimum value observed was 0, with a mean of 6.8177 and a maximum of 9.2370.

The control variables, firm size and firm age, averaged 18.081 and 51.204, respectively. The sampled companies had a minimum firm age of 10 years and a maximum of 100 years. These control variables are anticipated to influence market performance and were further examined in the multiple regression analysis to assess their impact alongside other factors.

Table 2: Summary of Descriptive Statistics (N=440)

Variables	Mean	Std. Deviation	Minimum	Maximum
TBQ	0.4391023	0.2248591	0.0472714	2.908975
PER	0.8199731	0.3671098	-0.2603284	2.13537
ENSI	7.413047	2.11276	0	11.41467
SSI	7.489847	1.2925	0	10.07934
GSI	6.817783	1.303225	0	9.237001
FSZ	18.08161	1.69891	12.90766	22.00283
FAG	51.20455	21.1563	10	100

Source: STATA Output Version 14.2 (See Appendix III)

Correlational Analysis

The study utilized the Pearson correlation matrix to assess relationships among variables and detect multicollinearity. Table 2 presents correlations, noting negative correlations with the independent variable at a 5% significance level. The analysis, following guidelines by Weisberg (2005) and others, found correlations within acceptable limits (±0.3996 to 0.0319), suggesting no significant multicollinearity issues.

Table 3: Correlation Matrix of the Variables

Variables	TBQ	PER	ENSI	SSI	GSI	FSZ	FAG
TBQ	1.000						
PER	-0.0350	1.0000					
ENSI	0.1733	0.1083	1.000				
SSI	0.1021	0.0827	0.3996	1.000			
GSI	0.0304	0.2573	0.0312	0.0425	1.0000		
FSZ	0.1440	0.2952	0.2603	0.3687	0.3201	1.000	
FAG	-0.0576	-0.0319	0.1166	-0.1685	0.0543	0.0376	1.000

Source: STATA Output (Version 14.2) (See Appendix III)

Regression Analysis

Regression Result on ENSI, SSI, GSI and TBQ

Table 4. Presents the Panel Data Regression Results for Model one (TBQ)

	Model one (1)			
Variables	**Coefficient**	**Std. Err**	**t**	**P>|t|**
Constants	**0.108404**	**0.0587091**	**1.85**	**0.065**
ENSI	0.0129855	0.0039237	3.31	0.001*
SSI	0.00458391	0.0071667	0.64	0.522
GSI	0. 0008325	0.0117099	0.07	0.943
FSZ	0.0120288	0.0053954	2.23	0.026**
FAG	-0.0004506	0.0004568	-0.99	0.324
Overall R^2			0.0395	
F-Sta./Wald Chi2 (5)			97.57	0.0001

Note. Stata 14 output based on data extracted from listed manufacturing companies from 2014-2023 Note * and **indicate 1% and 5% level of significance respectively.

The study's analysis highlighted several key findings regarding Tobin's Q ratio and its determinants among listed manufacturing firms in Nigeria from 2014 to 2023. The overall R-squared value of 0.0395 indicates that approximately 3.95% of Tobin's Q variability can be explained by environmental, social, and governance sustainability indices, alongside firm size and age as control variables. The F-statistic test with a value of 88.96 and a probability of 0.0001 confirms statistical significance, indicating that at least one independent variable significantly affects Tobin's Q. Specifically, environmental sustainability showed a significant positive effect ($\beta = 0.0129$, $p = 0.001$), aligning with legitimacy theory, suggesting a 1.29% increase in Tobin's Q per 1% increase in environmental sustainability. Conversely, social sustainability and governance sustainability both had a positive but insignificant effect ($\beta = 0.0045$, $p = 0.522$ and $\beta = 0.\ 0008$, $p = 0.943$), reflecting stakeholder theory principles.

Control variables showed varied impacts: firm size positively influenced Tobin's Q ($\beta = 0.0120$, $p = 0.026$), while firm age had a non-significant negative impact ($\beta = -0.00045$, $p = 0.324$), contrary to expectations. The unexpected negative relationship with firm age suggests increased regulatory burden and centralized structure affecting efficiency and market performance. These results contribute nuanced insights into the factors shaping market performance metrics in Nigeria's manufacturing sector, contrasting with previous findings and highlighting implications for corporate strategy and policy.

Regression Result on ENSI, SSI, GSI and PER

Table 5: Panel Data Regression Results for Model two (PER)

	Model two (2)			
Variables	**Coefficient**	**Std. Err**	**t**	**P>|t|**
Constants	**-0.4488085**	**0.1702678**	**-2.64**	**0.008**
ENSI	0.0004963	0.0089573	0.06	0.956
SSI	-0.0002285	0.0131998	-0.02	0.986
GSI	0.0554077	0.0152971	3.62	0.0001*
FSZ	0.0522377	0.011266	4.64	0.0001*
FAG	-0.0010836	0.0008812	-1.23	0.219
Overall R^2			0.1242	
F-Sta./Wald Chi2 (5)			70.21	0.0001

Note. Stata 14 output based on data extracted from listed manufacturing companies from 2014-2023 Note * indicates 1% level of significance.

The overall R-squared value for Model Two is 0.1242, indicating that approximately 12.42% of the variance in the Price Earnings Ratio (PER) can be explained by the independent variables and control variables. This suggests a moderate level of explanatory power, implying that other factors not included in the model also influence PER.

Environmental Sustainability Index (ENSI) shows a non-significant coefficient ($\beta = 0.00049$, $p = 0.956$) regarding its impact on PER. Social Sustainability Index (SSI) exhibits a negative coefficient ($\beta = -0.0002285$, $p = 0.986$) with PER, indicating a non-significant decrease in PER with higher social sustainability performance.

Governance Sustainability Index (GSI) shows a significant positive coefficient ($\beta = 0.05541$, $p = 0.001$) with PER, indicating a statistically significant impact of governance sustainability on PER. Suggests that strong governance practices positively influence the market valuation of Nigerian manufacturing firms.

Firm Size (FSZ) indicated a significant positive influence on PER ($\beta = 0.052$, $p < 0.05$), indicating larger firms tend to have higher PER. While Firm Age (FAG) shows a non-significant negative influence on PER ($\beta = -0.0010836$, $p = 0.219$), suggesting older firms may face challenges in market valuation due to structural complexities.

Test of Hypothesis

Hypothesis 1: Environmental sustainability reporting significantly influences Market Performance of Listed Companies Operating in Nigerian Manufacturing Sector ($P < 0.05$). However, Environmental sustainability reporting does not significantly influence Market Performance of Listed Companies Operating in Nigerian Manufacturing Sector ($P > 0.05$).

Hypothesis 2: Social sustainability reporting does not significantly influence Market Performance of Listed Companies Operating in Nigerian Manufacturing Sector ($P > 0.05$). However, Social sustainability reporting does not significantly influence Market Performance of Listed Companies Operating in Nigerian Manufacturing Sector ($P > 0.05$).

Hypothesis 3: Governance sustainability reporting does not significantly influence Market Performance of Listed Companies Operating in Nigerian Manufacturing Sector ($P > 0.05$). However, Governance sustainability reporting significantly influences Market Performance of Listed Companies Operating in Nigerian Manufacturing Sector ($P < 0.05$).

Hypothesis 4: Corporate sustainability reporting has an overall low impact on the market performance of listed companies operating in the Nigerian manufacturing sector (R2 range from 3.95% to 12.42%).

Discussion

This study explores the impact of corporate sustainability on market performance of listed companies in Nigeria's manufacturing sector from 2014 to 2023, focusing on Tobin's Q ratio and price earnings ratio. Environmental sustainability shows a significant positive effect on Tobin's Q ($\beta = 0.0129$, $p = 0.001$), indicating that firms' environmental initiatives enhance market performance by gaining legitimacy and investor confidence (Ghbayen et al., 2016). However, environmental sustainability has a positive but statistically insignificant impact on the price earnings ratio ($\beta = 0.000496$, $p = 0.956$), suggesting that while long-term benefits are recognized, short-term financial metrics may not reflect immediate gains (Okechukwu & Ugwu, 2023).

Social sustainability demonstrates a positive but statistically insignificant effect on Tobin's Q ($\beta = 0.00458$, $p = 0.522$), emphasizing its potential to enhance market performance through improved stakeholder relationships (Hardiningsih et al., 2020). Conversely, social sustainability shows a negative and insignificant relationship with the price earnings ratio ($\beta = -0.0002285$, $p = 0.986$), indicating that its impact on immediate financial performance remains limited (Ghbayen et al., 2016).

Governance sustainability exhibits a positive but statistically insignificant effect on Tobin's Q ($\beta = 0.0008325$, $p = 0.943$), suggesting that while governance practices contribute slightly to Tobin's Q, their impact is not significant in the Nigerian manufacturing context. In contrast, governance sustainability significantly influences the price earnings ratio ($\beta = 0.0554$, $p = 0.001$), indicating that strong governance practices enhance investor confidence and long-term financial health (Wahua & Ezeilo, 2021).

Overall, corporate sustainability, as measured by environmental, social, and governance factors, explains a modest portion of market performance variance with R-squared values of 3.95% for Tobin's Q and 12.42% for the price earnings ratio. This suggests that while sustainability initiatives contribute positively to market perception and financial health, other external and internal factors play significant roles in determining firm valuation and financial metrics within the Nigerian manufacturing sector (Ghbayen et al., 2016; Okechukwu & Ugwu, 2023; Hardiningsih et al., 2020; Wahua & Ezeilo, 2021). Integrating sustainability efforts with broader strategic initiatives is crucial for firms aiming to enhance their overall market performance effectively.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study examined the impact of Corporate Sustainability on the Market Performance of Listed Companies in the Nigerian Manufacturing Sector from 2014 to 2023, revealing nuanced implications. Environmental sustainability significantly enhanced Tobin's Q ratio, suggesting improved market valuation through societal environmental norms adherence, though it had an insignificant effect on the price earnings ratio, indicating long-term benefits not immediately reflected in short-term financial metrics. Social sustainability showed positive but insignificant effects on Tobin's Q and a negative, insignificant impact on the price earnings ratio, suggesting delayed financial returns. Governance sustainability had an insignificant effect on Tobin's Q but significantly enhanced the price earnings ratio, reflecting investor confidence in robust governance practices for long-term financial stability. Overall, corporate sustainability accounted for a modest portion of market performance variance, indicating its supplementary role alongside other

Recommendations

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

(i) Companies should focus on implementing green technologies by investing in energy-efficient technologies and sustainable production processes. They should adopt practices that minimize waste, reduce carbon emissions, and promote recycling.

(ii) Companies operating in the manufacturing sectors across the country should improve the transparency and consistency of environmental sustainability reporting to boost investor confidence and market valuation.

(iii) Companies should engage in investment in social sustainability, such as employee training and community engagement, should be prioritized. This study has shown a significant positive impact on Tobin's Q, suggesting that such investments are valued by the market.

(iv) Firms should implement strong governance practices, including clear and transparent reporting, ethical management, and robust internal controls. There is also the need for companies to conduct regular audits and ensure compliance with governance standards and regulations to maintain investor trust and confidence.

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EFFECT OF DIVIDEND PAYOUT ON THE FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study examined the effect of dividend payout on the financial performance of listed deposit money banks in Nigeria for a period 2013 to 2022. The study randomly selected ten (10) banks listed on the Nigeria Exchange group and obtained data from the annual reports of the banks for the period 2013 to 2022. The data extracted were analyzed using of regression, descriptive analysis and correlation analysis. The models were developed in an attempt to provide a relevant theory the study review dividend relevance theory and the Modigliani and Miller's (MM), and dividend signal theory. The study also reviewed empirical study that are relevant to the study For the first model, the dependent variable (FP), independent variables dividend payout with a proxies cash to total asset, liquid asset and loan to total asset. the study revealed that that there is negative insignificant relationship between cash to total asset on financial performance of listed deposit money banks in Nigeria, The study also found that there is a significant negative relationship between liquid asset and financial performance of listed deposit money banks in Nigeria, the study also revealed that there is a significant negative relationship between loan to total asset financial performance of listed deposit money banks in Nigeria, firm size has a positive insignificance with financial performance and leverages has a negative insignificance with financial performance of listed deposit money banks in Nigeria. The study therefore recommends that banks with riskier and higher profits should adopt a low dividend payout ratio. They should plough back a major proportion of the profit into the bank in order to retain capital for future investment.

Key word: Dividend Payout, Cash Asset, Liquid Asset, Loan To Total Asset And Financial Performance.

INTRODUCTION

Liquidity management is crucial for every organization. It means being able to pay current obligations on business. Oloidi and Adeyeye (2014) posited that, liquidity management entails elimination of default chances on obligations as they fall due and balancing between short term assets and liabilities. Liquidity ratios in the form of current ratio, quick ratio and acid test ratio are used for liquidity management in every organization. Liquidity ratios measure a business' ability to meet the payment obligations by comparing the cash and near-cash with the payment obligations. If the coverage of the latter by the former is insufficient, it indicates that the business might face difficulties in meeting its immediate financial obligations. This can, in turn, affect the company's business operations and effectiveness.

Dividend is a share of a company's net profits distributed by the company to its stockholders. The dividend is paid in a fixed amount for each share of stock held. Although most companies make quarterly payments in cash (cheques), dividends also may be in the form of property, scrip, or stock. Dividends are usually paid out of the current year’s profit and sometimes out of general reserves. They are normally paid in cash and described as cash dividend. Dividend policy of a company is determined by several factors such as the company’s financial needs. A company which is growing may require more funds to expand its operations and therefore may be lured to retain its earnings which are cheaper than external equity because retained earnings do not attract flotation costs. This will reduce dividend payout. Shareholders need for income is another factor which determines dividend payout policy.

Liquidity position of a company does determine the dividend payout. Watson and Head (2017) also posited that, dividend pay means cash outflow and though a company may have adequate earnings to declare dividends, it may not have sufficient cash to pay dividends and therefore the greater the cash position and overall liquidity of a company, the greater the ability to pay dividends. Lenders may put restrictions on dividend payment to protect their interest when a company is experiencing low liquidity or profitability. This will automatically affect the dividend policy of a company. Other factors which determine dividend policy of a company include shareholders need to have company grip on the organization, tax avoidance by shareholders, earnings stability of the company and legal obligations such as CAMA 2020.

The financial performance of companies amongst others is the primary element of dividend payment in any corporate policy which is basically the benefit of shareholders in return for investing their money in the organization. Other factors include financing limitations, investment chances and choices, company size, pressure from shareholders and regulatory regimes (Ajanthan, 2013). The financial performance of businesses does not only constitute a source of cash flow to the shareholders, it also offers information relating to company’s present and future dividend payout pattern. Literature has documented that profitability determine the level of dividend payout (Ajayi, 2016). Companies enjoying higher level of profitability are expected to pay higher dividends than those with lower profits.

Financial theory holds that dividend payment and performance have a positive relationship. Many previous studies have found the same result and posted performance as an important determinant of dividend payout (Kim & Jang, 2010). When there is an increase in the earnings of companies, they transfer it to the shareholders in form of dividend payout. Arnoth and Asness (2013) also revealed that higher earnings growth is associated with higher dividend payout. However, higher payout ratio means more dividends and fewer funds for expansion and growth and vice versa.

Considering dividend payout in information perspective, the dividends signaling theory prescribes that dividend payout can be used as a device to communicate information about a company’s financial performance to investors. In this perspective, financial performance is an indicator that dividend has to be paid to shareholders. Murekefu (2013) posited that cash dividend announcement convey valuable information which shareholders do not have about management’s assessment of a company’s future profitability, thus reducing information asymmetry. Such information can be made use of by investors in assessing the companies’ financial performance and making investing decision. Dividend policy under this model is therefore relevant (Al-Kuwari, 2019). Dividend policy remains one of the view-point of the companies. For a company, it is a pivotal policy around which other financial policies rotate. Dividend or profit allocation decision is one of the four decision areas in finance and it spurs performance. Performance is significant as determines the nature and quantum of dividends to investors and what proportion is to be retained over time.

In recent years, concern for non-payment or irregular payment of dividend is becoming worrisome in public companies for the investors and potential investors in Nigeria. Some of their failures could be traced to poor liquidity management. Just like other sectors have witness or are witnessing some form of poor dividend payment either due to poor liquidity management, the consumer goods sector cannot be singled out because of their peculiarities with other sectors and as such there is need for adequate attention. Poor liquidity management has far-reaching effect on financial performance thereby dividend payout of companies, it is to this end that the study investigated the moderating effect of financial performance on the relationship between corporate liquidity and dividend payout of listed consumer goods companies in Nigeria.

Previous studies in this area such as Agilebu (2019), Ubaka (2017), Adesina, Uwuigbe, Uwuigbe, Asiriuwa and Oriabe (2017), Okafor, Ugwuegbe, Ugochukwu and Ezeaku (2016), Muhammad and Muhammad (2016), Uwuigbe, Jafaru and Ajayi (2012) examined the direct relationship between corporate liquidity and dividend payout without considering effect of moderating variable. Similarly, studies such as Uwuigbe (2012); Akani and Sweneme (2016), Ayunku and Etale (2016), Adediran and Alade (2013), Rachid (2016), Simon-Oke and Ologunwa (2016) examined dividend policy and company performance separately. Therefore, financial performance is also important where dividend payment and its increase are needed because without consistent financial performance or increase in financial performance, the continuous payment or increase in payment of dividend may not be guaranteed. This study therefore, includes financial performance as a moderator between corporate liquidity and dividend payout ratio. Corporate liquidity has a strong relationship with financial performance of a company as established by literature and as such it is expected to affect the dividend payout of companies.

Prior studies have pointed out that there exists positive relationship between liquidity and dividend payout. Ahmed and Javid (2019) in their research noted that profitable companies with more stable net earnings can afford larger free cash flow and therefore payout larger dividends. They noted that market liquidity also has positive impact on dividend payout policy. Mahapatra and Sahu (1993) as cited in Arnoth and Asness (2013) in their analysis on the determinants of dividend policy found out that cash flow is a major determinant of dividend and therefore the higher the liquidity of a company the more dividend is paid and vice versa. Moradi, Valipour and Mousavi (2009) also in their study of determinants of dividend policy by companies listed in Tehran stock exchange (TSE) found out that, there exist a positive and significant relationship between dividend payout ratio and liquidity of a company.

In contrast there are those studies which have showed that there exists negative relationship. John and Muthusamy (2010) in their study noted that there exists a negative relationship between liquidity and dividend payout. Their study showed that cash paid out to investors in the form of dividends reduces cash on hand to the company, hence reducing liquidity of the company. Mehta (2012) observed that liquidity played an insignificant role in determination of dividend payout. Gill, Biger and Tibrewala (2010) also found out that liquidity had insignificant influence on dividend payout. From these findings it clearly emerges that some studies show that there is a positive effect of liquidity on dividends payout, while others show that there is a negative effect.

These studies relate to foreign companies operating outside Nigeria. In the Nigeria's context where there is existence of information asymmetry thus inefficient market, there is no clear study which has been done to establish whether there is a positive or negative effect of liquidity on dividend payout by companies quoted at NSE and therefore this study aims at bridging this gap.

Objectives of the Study

The main objective of this study was to examine the effect of corporate liquidity and dividend payout on financial performance of listed deposit money banks in Nigeria. The other specific objectives were as follows:

i. To determine the effect of cash asset on dividend payout of listed deposit money banks in Nigeria.
ii. To determine the effect of liquid assets on dividend payout of listed deposit money banks in Nigeria.
iii. To determine the effect of firm loan to total assets on dividend payout of listed deposit money banks in Nigeria.

Hypotheses of the Study

Based on the research objectives, the following null hypotheses were formulated:

H_{01}: Cash assets does not significantly impact on dividend payout of listed deposit money banks in Nigeria.

H_{02}: Liquid assets does not significantly impact on dividend payout of listed deposit money banks in Nigeria.

H_{03}: Firm loan to total assets does not significantly impact on dividend payout of listed deposit money banks in Nigeria.

LITERATURE REVIEW

Concept of Financial Performance

Performance is the ability of a company to make effective use of resources at it's disposal in order to achieve the desired objective. Hansen and Mowen (2005) identified two (2) types of performance, financial performance and non-financial performance. Financial performance is defined as the outcome of how well assets of a company are utilized to generate income (Etim, 2011). It is a yardstick applied to measure the financial health of a company over a given period of time. It is also described as a measure of company policies and operations in monetary terms, the result of which could be reflected on companies Return on Assets (ROA), Return on Equity (ROE) and sales growth. The most objective way to evaluate the financial performance of a company is the analysis of financial statements (Etim, 2011). Also, Islam et al. (2011) defined company performance as the company's success in the market.

Company performance is a focal phenomenon in business studies. However, it is also a complex and multidimensional phenomenon. Performance can be characterized as the company's ability to create acceptable outcomes and actions. Profit is the difference between revenues and costs, in a trade transaction; profit is the difference between the price at which a good is sold and the price at which goods is bought (Valentino, 2004). This means that in running a business, net profit is what is left out of turn-over over after paying suppliers, workers, financing institution, and the state.

Concept of Dividend Payout

Different direction of meaning has been accredited to dividend but for the purpose of this study we will also consider the term dividend payouts are that part of the profits of a company that is distributed amongst its shareholders (Mohanraj & Deepa, 2012). Ajanthan (2013) stated that it is the benefit of shareholders in return for their risk and investment in shares of companies. Thus, dividends are not only cash paid out to shareholders. According to Pandey (2011), dividend does not only involve the payment of cash to shareholders, but can take the form of stock/script dividend and property dividend. Generally, dividends are payments made by a company to its shareholders from the profits made from operations. It represents the compensation for the shareholder's delayed consumption. These profits are preferred to retain by management.

According to Arthur and Sheffrin (2013), they are payments by a corporation to its shareholders. It is that part of corporate profits that is paid out to shareholders. In this understanding, when a corporation earns a profit or surplus, that money can be put to two uses: it can either be re-invested in the business, or it can be distributed to shareholders. Ozuomba, Anichebe and Okoye (2016), Are in supports of two ways to distribute cash to shareholders which includes: share repurchases or dividends. Dividends are usually paid out of the current year's profit and sometimes out of general reserves. They are normally paid in cash, and this form of dividend payment is known as cash dividend. Another option available to a company for the distribution of earnings is by stock dividend (bonus issue) which is supplementary to cash dividend.

According to Section 370 subsection (1) of CAMA, a company may in the annual general meeting, declare dividend only on the recommendation of the directors. The company may from time to time pay to the members such interim dividends as appear to the directors to be justified by the profits of the company. According to sub-section (3), the general meetings shall have power to decrease the amount of dividend recommended by the directors, but shall have no power to increase the amount recommended. While sub-section (5) stated that, subject to the provisions of this Act, dividend shall be payable only out of the distributable profit of the company. Furthermore, section 381 of CAMA states that a company shall not declare or pay dividends if there are reasonable grounds for believing the company is or would be, after the payment, unable to meet up with or pay its liabilities as they become due.

Bierman (2014), Baker et al. (2013) Frankfurther and Wood (2013) have described dividend as an appropriation of profits to shareholders after deducting tax and fixed interest obligations on debt capital. Dividends are compensatory distribution to equity shareholders for both time and investment risks undertaken (Uwuigbe, Jafaru & Ajayi, 2014). Pandey (2015) define dividend

as a portion of a company's net earnings which the directors recommend to be distributed to shareholders in proportion to their shareholdings in the company. It is usually expressed as a percentage of nominal value of the company's ordinary share capital or as a fixed amount per share. Dividend payment is a major component of stock return to shareholders (Zakaria, Muhammad &Zulkifli, 2012). Jo and Pan (2017) asserted that dividend payment could provide a signal to the investors that the company is complying with good corporate governance practices.
Dividend payout is the amount of cash that a company sends to its shareholders in the form of dividends. The company can decide to send all the profits back to its shareholders or investors, or could keep a portion of it as retained earnings. Healthy dividends payouts is an indication that companies are generating real earnings rather than cooking books (Oloidi & Adeyeye, 2014).

Forms of Dividend Payout of Companies
There are various types of dividends that companies pay out. These include; cash dividend, bonus shares, stock dividend, share splits, script dividend, bond dividend, and property dividend. A company should have enough cash in its bank account when cash dividends are declared. To make To make this possible, the company would have taken adequate measures to ensure the availability of cash. Some companies take the precaution of holding their reserves in cash and marketable securities. When they declare dividends, they dispose those securities to enable them have enough cash to meet their obligations to the shareholders. The cash account and the reserve account of a company will be reduced when the cash dividend is paid. Thus, both the total assets and the net worth of the company are reduced when the cash dividend is distributed.

An issue of bonus shares is the distribution of shares free of cost to the existing shareholders. Issuing bonus shares increases the number of outstanding shares of the company. The bonus shares are distributed proportionately to the existing shareholders. The declaration of the bonus shares will increase the paid-up share capital and reduce the reserves and surplus (retained earnings) of the company. The total net worth is not affected by the bonus issue. In fact, a bonus issue represents a recapitalization of reserves and surplus. It is merely an accounting transfer from reserves and surplus to paid-up capital.

Dividend Payout Measures
Dividend Payout Ratio (DPR): This measures the percentage of net income that is distributed to shareholders in the form of dividends during the year. In other words, this ratio shows the portion of profits the company decides to keep to fund operations and the portion of profits that is given to shareholders. Investors are particularly interested in the dividend payout ratio because they want to know if the company or companies are paying out a reasonable portion of net income to investors. Investors can see that these dividend rates cannot be sustained very long because the company will eventually need money for its operations. Dividend payout ratio/payout ratio is calculated as;

$$\frac{\text{Dividend Per Share}}{\text{Earnings Per Share}} \text{ X } 100$$

A consistent trend in this ratio is usually more important than a high or low ratio. Since it is for companies to declare dividends and increase their ratio for one year, a single high ratio does not mean that much. Investors are mainly concerned with sustainable trends. Conversely, a company that has a downward trend of payouts is alarming to investors. Generally, more mature and stable companies tend to have a higher ratio than never start up companies. The dividend payout ratio is the amount of dividends paid to stock holders relative to the amount of total net income of a company. The amount that is not paid out in dividends to stockholders is held by the company for growth. The amount that is kept by the company is called retained earnings.

Dividend Per Share (DPS): This is the sum of declared dividends for every ordinary share issued. Dividend per share (DPS) is the total dividends paid out over an entire year (including interim dividends but not including special dividends) divided by the number of outstanding ordinary shares issued. DPS are the amount of dividends that a publicly traded company pays per share of common stock, over their reporting period that they have issued.
Dividend per share can be calculated by using the following formula:

$$\frac{\text{Total Dividend}}{\text{Number of Outstanding Ordinary Shares}} \text{ X } 100$$

DPS may be used by individuals who are evaluating various stocks to invest in and prefer companies who pay high dividends.

Net Profit Margin (NPM): This is the percentage of revenue remaining after all operating expenses, interest, taxes and preferred stock dividends (but not common stock dividends) have been deducted from a company's total revenue. The formula for net profit margin is;

$$\frac{\text{Net profit}}{\text{Marginal Revenue}} \text{ X } 100$$

Net profit margin is one of the most closely followed numbers in finance. Shareholders look at net profit margin closely because it shows how good a company is at converting revenue into profits available for shareholders. Changes in net profit margin are endlessly scrutinized. In general, when a company's net profit margin is declining over time; a myriad of problems could be to blame, ranging from decreasing sales to poor costumer experience to in adequate expense management. Net profit margin is often used to compare companies within the same industry in a process known as 'margin analysis'. Net profit margins is a percentage of sales, not an absolute number, so it can be extremely useful to compare net profit margins among a group of companies to see which are most effective at converting sales into profits.

Earnings per share (EPS): Earnings per share also called net income per share, is a market prospect ratio that measures the amount of net income earned per share of stock outstanding. In other words, this is the amount of money each share of stock would receive if all of the profits were distributed to the outstanding shares at the end of the year. Earnings per share also show how profitable a company is on a shareholder basis. So a larger company's profits per share can be compared to a smaller company's profits per share. Obviously, this calculation is heavily influenced on how many shares are outstanding. Thus, a larger company will have to split its earnings amongst many more shares of stock compared to a smaller company. The formula for calculating earnings per share is given as;

$$\frac{\text{Profit after Tax}}{\text{Number of Common Stock Outstanding}} \text{ X } 100$$

It is noticed that the preferred dividends are removed from net income in the earnings per share calculation. This is because earnings per share only measure the income available to common stockholders. Preferred dividends are set aside for the preferred shareholders and cannot belong to the common shareholders. Earnings per share are the same as any profitability or market prospect ratio. Higher earnings per share are always better than a lower ratio because this means the company is more profitable and the company has more profits to distribute to its shareholders.

Concept of Corporate Liquidity

Company's liquidity refers to the ability to sell its assets instantaneously without incurring unforeseen losses in the market value Liquidity is the degree to which an asset or security can be bought or sold in the market without affecting the asset price. It is the ability to convert an asset to cash quickly (Pandey, 2005). Liquidity refers to the ease with which an investment asset (stock, bond, and mutual funds) can be converted into cash in a short period of time without a significance decrease in its value (Eljelly, 2004).

Liquidity is a relatively broad concept which in this case refers to the ability to trade large volumes quickly, at low cost and without moving the price. Liquidity affects the attractiveness of a stock to investors. Investors may require higher expected returns on assets whose returns are sensitive to liquidity. Liquidity is about how big the trade-off is between the speed of the sale of consumer goods and the price it can be sold for. In a liquid market, the trade-off is mild: selling quickly will not reduce the price much (Sharan, 2009).

Determinant of Corporate Liquidity

Nearly all companies hold cash reserves to fulfill future financial needs. If capital markets were perfect, a company would not have needs to hold substantial cash reserves. When companies face a cash shortage, they can find the needed funds in the market at a cost which is function of the anticipated risk and profitability of their projects. Local market liquidity is also an (Bekaert et al., 2007). According to Scott (2003) cash flow is a key component in any business. Therefore, maintaining solvency and liquidity is important for a business sustainability and growth. A quick and comprehensive way of assessing the business liquidity is through the use of liquidity ratios. Liquidity ratios are used to determine a business's ability to meet its short-term financial obligations. These ratios are of particular concerns to both owners and creditors of the business.

Cash to Total Assets: Cash assets, this measures the portion of a company's assets held in cash or marketable securities. This number should be the same or lower than the company's expressed credit terms. Although a high ratio may indicate some degree of safety from a creditor's viewpoint, excess amounts of cash may be viewed as inefficient. Other ratios can also be converted to days, such as the cost of sales to payables ratio.

Cash to total assets: $\frac{\textbf{Cash}}{\textbf{Total Assets}}$

Empirical Studies

Ijaiya et al. (2013) focused on the relationship between financial performance and dividend payout among listed companies in Nigeria. They develop two models in an attempt to provide a theoretical explanation. The result from the first model showed an insignificant relationship between dividend payout ratio and financial performance of the selected quoted companies in

Nigeria while the result from the second model showed a significant but inverse relationship between dividend payout ratio and earnings per share.

Uwuigbe et al. (2012) supporting this proposition Dividends are usually distributed either in form of cash (cash dividend) or share (share/stock dividends). In corporate companies, dividend function and performance require serious assessment of the twin effects on corporate performance and the value of the company. Optimal dividend policy requires that management allocates to shareholders payout ratio that guarantee the maximization of their wealth through increased market value of the company and its shares. Dividend policy can be residual, stable or predictable policy, low regular plus extra policy or regular payout policy (Akani & Sweneme, 2016).

Agilebu (2019) employed descriptive and longitudinal design to examine the effect dividend decision and economic value added of quoted Nigeria manufacturing companies. Secondary data from financial statement of 15 quoted manufacturing companies were used. Result revealed a 75 percent variation from the fixed effect results on economic value added of the manufacturing companies. Beta coefficient of the predictor variables found that dividend yield have negative effect on economic value added while dividend per share, dividend payout ratio and retention ratio have positive and significant effect on economic value added of the quoted manufacturing companies.

Ubaka (2017) examined the effect of corporate dividend policy on the company performance of conglomerate companies listed on the floor of the Nigeria stock exchange. The study covered the period from 2012-2016 and a sample of three conglomerate companies were studied. Random effect regression result showed that dividend payout and are not significant in determining performance.

Uwuigbe, Jafaru and Ajayi (2012) employed ordinary least squares regression analysis technique to investigate the relationship between dividend policy and company performance among listed companies' in Nigerian Stock Exchange for the periods of 2006-2010 . The finding showed that there is a significant positive association between the performance of companies and the dividend payout of the sampled companies in Nigeria.

Okafor, Ugwuegbe, Ugochukwu and Ezeaku (2016) employed pooled panel least square model to investigate the effect of board interest on dividend policy of Nigerian manufacturing sector for the period of 2009 to 2015. The result revealed that board interest has a negative and insignificant impact on dividend payout of the companies under consideration. Also, ownership concentration has a positive but insignificant effect on dividend payout of the Nigerian manufacturing companies while company size was found to have a positive and significant effect on dividend payout among Nigerian manufacturing companies.

Muhammad and Muhammad (2016) used ordinary least square regression model to investigate the determinants of dividend payout of oil and gas industry listed on Karachi Stock Exchange (KSE) in Pakistan. The study covered the period from 2008 to 2014 and found that there is a significant positive link between profitability and dividend payout while liquidity showed insignificant relationship with dividend payout.

Adesina et al. (2017) examined the effect of dividend policy on share price valuation in the Nigerian banks, with a particular reference to four major banks in Nigeria, namely; Access Bank, First Bank, United Bank for Africa and Guarantee Trust Bank. The study employed the Ordinary Least Square (OLS) regression mechanism and found that a significant positive relationship exist between earnings per share and market price of Nigerian banks.

Odum et al. (2019) employed panel ordinary least square regression techniques to examine the impact of dividend payout ratio on the value of companies. The study focused on breweries and beverage companies listed on the Nigerian stock exchange for the periods of 2007-2016. Findings revealed that profitability ratio and leverage ratio positively and significantly impact on value of the company. This implies that only the variables of company leverage, and Profit after Tax are significant factors that drives company value in both breweries and beverages companies among listed companies in Nigeria.

Using the ordinary least squares method, Olabisi et al. (2017) examined the determinants of dividend policy among Nigerian listed consumer goods manufacturing companies in Nigeria. The study used seven (7) randomly selected consumer goods manufacturing companies from twenty-seven (27) listed companies on the Nigeria Stock Exchange (NSE) as at 2016. Empirical result showed that there is a negative and significant relationship between profitability and dividend policy. Also, a positive and significant relationship exists between liquidity and dividends of the companies.

Khan, Nadeem, Islam, Salman and Gill (2016) used OLS technique to examine the impact of dividend policy on company performance in Pakistan from 2010-2015. The findings showed that there is a positive relationship between return on assets, dividend policy, and growth in sales. Also, dividend payout ratio and leverage have significant negative relationship with the return on equity of the companies.

Murekefu and Ouma (2012) examined the relationship between dividend payout and company performance using data obtained from the annual reports of companies listed in the Nairobi Securities Exchange for a nine-year period (2002 to 2010). Analytical tools employed were descriptive statistics and Pearson correlation technique. Result showed that dividend payout was a major factor affecting company performance.

Akani and Sweneme (2016) examined the impact of dividend policy and the profitability of selected quoted manufacturing companies in Nigeria from 1981-2014. Analytical techniques employed were multiple regression analysis. Findings revealed that all the independent variables have variables have positive relationship with the dependent variables except dividend yield

Theoretical Framework

Dividend Irrelevance Theory

Modigliani and Miller (1961) in their seminal contribution to research on Dividend policy argued that the value of the company was independent of its dividend policy. MM argued that the value of a company depends only on the income produced by company assets and not on how this income is split between dividends and retained earnings. MM further noted that any shareholder can in theory construct its own dividend policy, e.g. if a company does not pay dividends, a shareholder who wants 10% dividends can create it by selling 10% of his stock. They argued that if investors could buy and sell shares and thus create their own dividends without incurring cost, then the company's dividend policy would truly be irrelevant.

MM further supported their argument by saying that, if a company does not have sufficient cash to pay dividends and therefore issues new shares to finance the payment of dividends then, the shareholders get the new shares in the form of dividends but suffer an equal amount of capital loss since the value of their claim on assets reduces. Thus, the wealthy of the shareholders does not change. The new shareholders part with their cash in exchange for new shares and the existing shareholders transfer part of their claim to the new shareholders in exchange for cash. Thus there is no net gain or loss and the value of the company will remain un- altered after the transaction. MM based their argument on the assumption that, there is no corporate taxes, no transaction cost associated with flotation of new shares, capital markets are efficient, and there is no uncertainty, all investors make decisions using the same discount rate.

Dividend Signaling Theory

This theory suggests that a company announcement of an increase in dividend payouts act as an indicator of the company possessing strong future prospects. Ross (1977) in an empirical study on the impact of dividends on share prices, observed that the increases in dividends is often accompanied by increases in share prices while a dividend cut or reduction generally leads to stock price decline. According to Ross (1977), it was suggested that investors preferred dividends to capital gains. When investors have incomplete information about the company, they will look for other information that may provide a clue as to the company's future prospects.

Managers have more information than investors about the company, and such information may inform their dividend decisions. When managers lack confidence in the company's ability to generate cash flows in the future, they may keep dividends constant, or possibly even reduce the amount of dividends paid out. Conversely, managers that have access to information that indicates very good future prospects for the company are more likely to increase dividends. Investors can use this knowledge about managers' behavior to inform their decision to buy or sell the company's stock, bidding the price up in the case of a positive dividend surprise, or selling it down when dividends do not meet expectations.

According to MM, investor's reactions to changes in dividend policy do not necessarily mean that investors prefer dividend to retained earnings. Rather, they argued the price changes following dividend actions simply indicate that there is important information or signaling content in dividend announcements. Murekefu et al. (2015) opined that cash dividend announcement convey valuable information which shareholders do not have about management's assessment of a company's future profitability, thus reducing information asymmetry. Such information can be made use of by investors in assessing the companies' financial performance and making investing decision. Dividend policy under this model is therefore relevant (Al-Kuwari, 2019).

METHODOLOGY

This study adopted correlation research design. This is due to the fact that the data is secondary in nature, since data was sourced from already existing annual accounts. The study employed the correlation research design that links proxies of corporate liquidity, financial performance and dividend payout of some listed consumer goods companies in Nigeria. The research design describes the procedures use by the researcher for establishing the associations between independent variables and dependent variable (Khan, 2018). The population of the study consist of all the 14 deposit money banks listed on the Nigerian Exchange Group (NGX) as at December, 2022. A sampling criteria method was used to select a sample of 10 listed deposit money bank. First, the banks that have been consistently paying dividends were considered. Also, only companies that have remain quoted at NXG for ten years period from 2013 to 2022 were selected. The study data was collected from Secondary source. Secondary data were extracted from the audited annual reports and financial statements of individual companies sourced from the NGX. In order to determine the relationship that exists between corporate liquidity and dividend payout of the quoted companies at the NGX, a period of ten years (2013- 2022) was considered. The annual financial statements from where data were sourced essentially included the statement of comprehensive income and financial position.

Table 1: Variables Definition and Measurement

Variable	Nature of Variable	Definition/Measure	Source
Cash assets	**Independent**	Cash/Total Assets	Hashemijoo (2015)
Loan to total deposit (LTD)	**Independent**	Total Loan/Total Assets	Jo (2019)
Liquid assets (FLTA)	**Independent**	Company Loan to Total Assets of Industry	Fama (2016)
Financial Performance	**Dependent**	Earnings before Interest and Taxes/ Return on assets	Pandey (2015)
Company size	**Control**	Log of total assets	Baker (2019)
Leverage	**Control**	Total Debt/Total Assets	Baker (2019)

Sources: Researcher, 2024.

The study employed descriptive statistics, correlation analysis and multiple regressions as the technique of analysis. The independent variables and moderator variable, financial performance were regressed against the dependent variable (dividend payout). Regression is widely used to determine the association between independent and dependent variables.

The relationship between dividend payout and liquidity is shown after the definition of the notations. Regression relationship between corporate liquidity, financial performance and dividend payout model is given below models respectively.

FP = β_0 + β_1 CTA + β_2 LTD + β_3 FL/TA + β_6 FS + β_7 LV + μ……………………………………………………………………………….…Model 1

FP = β_0 + β_1 CTA*FP + β_2 LTD*FP + β_3 FL/TA*FP + β_6 FS + β_7 LV + μ…………………………………………...……………………….…Model 2

Where:

FP = Financial Performance

CTA = Cash to Total Assets
LTD = Liquid Assets to Total assets
FL/TA = Company Loan to Total Assets in industry company
FS = Company Size
LV = Leverage
β_0 = The Intercept of the Regression Equation.
β_1 , β_2 , β_3 , β_4 , β_5 , β_6 , β_7 = Regression Co-efficient of Independent Variables.
$\boldsymbol{\mu}$ = Error Term

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics is presented in Table 4.1 showing the minimum, maximum, mean, standard deviation, skewness, kurtosis and Shapiro wilk of the study variables.

Table 2: Descriptive Statistics

Variable	*Min*	*Max*	*Mean*	*Std. Dev.*	*Skwenss*	*Swilk*
FP	-20.2	9.53	1.285	2.810	0.000	0.000
CTA	0.58	33.5	6.237	6.533	0.000	0.000
LTD	3.55	87.9	62.27	15.81	0.064	0.067
BATA	0.52	28.2	14.16	4.290	0.000	0.000
FS	18.4		20.59	0.848	0.053	0.005
LV	0.69	1.23	0.860	0.782	0.000	0.000

Source: Author computation 2024

Table 2 Shows that Cash to total assets recorded a minimum value of 0.58 and maximum value of 33.5 implying that within the banking industries and during the study period, there were companies that the cash far outweighs the amount of total physical assets. The highest value implies that there was company that had 33.5% of cash, while the non-cash assets were only about 57.5%. The mean value of 6.237 implies that, on the average, the companies' total cash to assets ratio stood at an average of 6%. The standard deviation was higher than the mean thereby implying that the deviation of the mean from actual value was wide. The values of the Jacque bera, which is significant for both skewness and kurtosis values, implies abnormality of the data.

Liquid assets to total assets had a minimum value of 3.55 and a maximum value of 87.9, implying that the lowest percentage of liquid assets to total assets in the banking industries is about 4%, while the highest percentage of liquid assets to total assets held by the companies was 87.9%. On the whole, liquid assets to total assets recorded a mean value of 62.27, implying that, on the average, most of the company's liquid assets to total assets level stood at about 62%. The standard deviation implies that the mean value recorded was the true average for the companies as it was lower than the mean. The values of 1%, from the Jacque bera statistics for normality test which included both skewness and kurtosis, implies that the data was normally distributed.

Company loan to total assets had a minimum value of 0.52 and a maximum value of 28.2 implying that there are some banks whose ratio of loan to total assets stood at lowest of less

than 1% in the sector during the study period. Meanwhile, the highest percentage recorded for company loan to total assets amongst the companies was 28.2%. The mean value of about 14.16 implies that, on the average, the banks maintained at least about 14% ratio of loan to total assets. The standard deviation for this variable implies that its mean is a well-representation of average as there was no much deviation from the mean. The data for banks loan to total assets was not normally distributed based on the results from the kurtosis test and skewness test. This was further substantiated by the significant p-value from the Jacque bera test of 1%.
value showed that the data is normally distributed. This is further buttressed by the significant value from the Jacque bera statistics test which shows a significant p-value of above 5%.

Financial performance used as a dependent variable has a minimum value of -20.2 and a maximum value of 9.53. This shows the minimum performance in the banking sector was negative return on assets which represent loss within the period, however, the highest performance stood at about 10% of the assets deployed by the listed deposit money banks. On average, all the companies had, at least 1% of the assets deployed as profit within the study period. The standard deviation of financial performance connotes that the mean does represent the actual mean as there was high deviation. The Jacque bera statistic test shows a p-value of 1% implying that the data do not follow the normal distribution pattern.

Company size, having been converted from its natural logarithm, recoded a minimum value of ₦2, 287,988 and a maximum value of ₦29, 460,785 for all the companies within the study period. This indicates that the lowest amount of investment in assets by the companies was about N2, 200,000.00, while the highest amount invested stood at about N29, 400,000.00. The mean value of about ₦5, 291,462 implies that, on the average, most of the companies spent over N5m as investment in total assets. The standard deviation of company size implies that the mean value is actual representation of true average as there was little deviation. The p-value from the Jacque bera test for normality indicates that the data for total assets is not normally distributed as it is significant at 5% and 1% level.

Leverage used as control variable has a minimum value of 0.69 and a maximum value of 1.23. This shows that within the consumer goods sector minimum usage of leverage as against equity financing stood at about 68%, while the highest percentage of leverage represented in the debt-equity ratio of companies stood at about 123%. On the average, all the companies had, at least 86% of leverage as a source of financing for their operations within the study period. The standard deviation of leverage indicates that the mean does represent the true mean for the variable. The Jacque bera statistic test shows a p-value of 1% implying that the data do not follow the normal distribution pattern.

Correlation Analysis
Table 3 shows the correlation matrix values between the dependent and the independent variables. The Spearman correlation coefficient shows the level of significance of the coefficients.

Table 3: Presents the Correlation Matrix

	FP	CTA	LTD	BATA	FS	LV	
FP	1.0000						
CTA	0. 0386	1.0000					
LTD	0.0664	0.1281	1.0000				
BATA	0.2117*	0.1592	0.1201	1.0000			
FS	0.0319	0.0740	0.0124	0.0212	-0.0004	1.0000	
LV	0.0619	0.0876	-0.1406	0.1797	-0.0436	-0.0125	1.0000

*. Correlation is significant at 0.01 or 0.05 level (2-tailed)

Table 3 shows that cash to total assets and other independent variables, is significant but negative association with ratio of cash to total assets of listed deposit money banks in Nigeria. Company loan to total assets and leverage has a positive relationship with ratio of cash to total assets of the company. Furthermore, the relationship between liquid assets to total assets, company size and cash to total assets revealed direct association implying that the variables move in the same direction. Table 3 also indicate that company loan to total assets and company size has positive relationship with liquid assets to total assets of listed deposit money banks in Nigeria. The association between company loan to total assets and working capital ratio is negative and significant while the relationship between company loan to total assets and leverage of companies showed a positive and significant relationship. Meanwhile the relationship between ratios of company loan to company size was weak and positive. The relationship between financial performance and cash to total assets and liquid assets to total assets is positive but the relationship between cash to total assets and financial performance is significant.

Regression Analysis

Table 4: Summary of Regression Result (Random Effect Model)

Variables	Coefficient	Z-Statistics	Prob. Value
Constant	1.72043	2.74	0.007
CTA	-0.0062	-1.16	0.248
LTD	-0.0146	-8.24	0.000
CTA*FP	0.0075	4.84	0.000
LTD*FP	0.0083	8.63	0.000
BATA*FP	0.0049	14.3	0.000
FS	0.0871	0.38	0.708
LV	-0.1557	-0.57	0.570
R^2	0.9719		
F- Statistics	1017.51		
Prob>Chi^2	0.0000		
Test of Significance Difference (F)	53.81		
Probability F	0.0000		

Source: Result output from STATA 13

Table 4 indicates a cumulative R^2 of 0.9719 which is the multiple coefficient of determination gave the proportion of the total variation in the dependent variable as explained by the independent variable jointly. Hence, it signified that 97.19% of the total variation in dividend payout of listed deposit money banks in Nigeria is accounted for by the proportion of cash to total assets, liquidity assets to total assets, company loan to total assets, on financial performance.

The F-statistics which represents the Fisher Exact Statistics recorded a value of 1017.51 which is significant at 1%. This indicates that the corporate liquidity, financial performance and dividend payout model is fit. It implies that for any change in corporate liquidity and financial performance of the listed deposit money banks in Nigeria; their dividend payout ratio will be affected directly. The value of F-statistics which is statistically significant at a level of 0.0000 (1%) implies that there is 99.9 percent probability that the relationship among the variables were not due to mere chance. As such, the results from the regression can be relied upon. In addition, it implies that the independent variables reliably predict the dependent variable of the study.

Effect of Cash to Total Assets on Dividend Payout

Table 4 indicates that the coefficient for cash to total assets (CTA) was -0.0062 with a significant value of 0.248. This signifies that cash to total assets has a negative and not significant effect on dividend payout of listed consumer goods companies in Nigeria. The coefficient of 0.0062 implies that for every increase in listed consumer goods companies' cash available, the dividend payout decrease by the same magnitude. This may be as a result of the fact that when the amount of cash held by the companies increases, it is an indication that the companies cash is tied down, which reveals an under investment and as such will not be able to yield any high returns through which high ratio of dividend payment could be encouraged.This finding is in line with those of Maina (2002), Agilebu (2019), Ubaka (2017), but it is contrary to those empirical review section in chapter 2 of Banarjee et al. (2007), Jiang, Ma, and Shi (2017), Banarjee et al. (2007). Based on this the study accept the null hypothesis one of the study which state that cash to assets ratio has a significant effect on dividend payout of listed consumer goods companies in Nigeria.

Effect of Liquidity Assets on Dividend Payout

The regression results in table 4.3 revealed that liquidity assets to total assets of companies (LTD), has a coefficient value of -0.0146 which is significant at 1% level. This indicates that liquidity assets to total assets ratio has a negative but significant effect on dividend payout of listed consumer goods companies. The coefficient implies that for every increase in the level of liquidity assets to total assets of listed consumer goods companies, dividend payout decreases due to their high investment in liquid assets rather than capital assets. Capital assets are more drivers to high returns in companies rather than liquid assets. This result may be as a result of the fact that listed consumer goods companies may be overcapitalized due to under trading, while trading off their long-term liquidity. Too much tied down of capital reduces return on investment to listed consumer goods companies. Even though listed consumer goods companies may trade off investing those liquid assets, the fund may remain idle in the organization thereby generating zero returns. The finding is in line with those of Maina (2002), Agilebu (2019), Ubaka (2017). But it is contrary to those of Banarjee et al. (2007), Jiang, Ma, and Shi (2017), Banarjee et al. (2007). Based on this, the study rejected the null hypothesis two of the study which states that liquid assets to total assets has no significant effect on dividend payout of listed consumer goods companies in Nigeria.

Effect of Company Loan to Total Assets on Dividend Payout

The company loan to total assets (BATA) variable has a coefficient value of -0.0087 which is significant at 1% level. This shows that company loan to total assets have a significant and negative effect on dividend payout of listed consumer goods companies in Nigeria. The coefficient connotes that an increase in the level of company loan to total assets will decrease the level of dividend payout significantly. This may be as a result of the fact that some listed consumer goods companies' assets are largely finance from loans. Therefore, it expected to significantly reduce the level of dividend payout to shareholders due to the high service debt rate of the companies. As the companies struggle to pay back the principal and interest on the loan, they have little or nothing left to pay dividend to shareholders of the companies. This finding is in line with the studies of Maina (2002), Agilebu (2019), Ubaka (2017). However, it is in contrast to those of Banarjee et al. (2007), Jiang, Ma, and Shi (2017), Banarjee et al. (2007). Based on this, the study rejected the null hypothesis three of the study which states that company loan to assets ratio has no significant effect on dividend payout ratio of listed deposit money banks in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Conclusion

From the findings from the data analysis in chapter four, the study concludes that having high ratio of cash to total assets is associated with decrease in dividend payout ratio. In addition, moderating cash to assets ratio with financial performance does significantly and positively influence the level of dividend payment of the listed consumer goods companies. High ratio of liquid assets to total assets does influence dividend payout ratio as it water down the total amount of investment in capital assets by listed consumer goods companies thereby increasing the level of liquidity and thus reducing the level of dividend payout ratio of listed consumer goods companies. But when the ratio liquidity assets to total assets was moderated with financial performance, they jointly prove to be a key driver to increased dividend payout ratio of companies significantly. Increase in company loan to total assets is associated with poor dividend payout ratio. This is due to their inability to generate more income from operations as a result spending more on payment and servicing of debt. Increase in both ratio of company loan to total assets with increase in financial performance proves to enhance the dividend payout ratio of the listed consumer goods companies.

Recommendations

Based on the findings and conclusion, the study came up with the following recommendations in order to enhance dividend payout of listed consumer goods companies in Nigeria:

i. The management should reduce the ratio of liquid cash to total assets to the barest minimum through investment in profitable ventures that yield higher returns rather than tied down those cash without any returns. When the cash available is deployed effectively and efficiently, it increases the financial performance through returns on investment and hence encourages higher payment of dividend to companies' shareholders.

ii. The management of listed consumer goods companies should also reduce the ratio of liquid assets to total assets as this will make them more capital assets stronger than liquid assets. The liquid assets to be kept are in order to meet up with the companies a daily operation which helps generate future profits and thus drives improved payment of dividend.

iii. Company loan to total assets should be minimized as this may consume higher percentage of the companies' returns on investment thereby reducing the companies' ability to pay dividend to their shareholders and thus may signal bad news to the potential investors.

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EFFECT OF ENTERPRISE RISK MANAGEMENT ON THE PROFITABILITY OF QUOTED INSURANCE COMPANIES IN NIGERIA

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Abstract
Nigeria's insurance industry, despite contributing less than 1% to Nigeria's GDP, is considered crucial to the economy as it controls large sums of money and protects businesses from diverse risks. However, concerned about business failures in the insurance industry, the National Insurance Commission in 2012, mandated the adoption of Enterprise Risk Management (ERM) by all insurance businesses in Nigeria to address this issue and to deter future business failures. This research work studied the effect of ERM on the profitability of Nigerian insurance businesses over a 10-year period, encompassing the two years prior to, and eight years following the introduction of ERM. ERM is studied from two perspectives: ERM adoption and ERM implementation. Profitability, the dependent variable was measured by Return on Assets while ERM adoption was measured using Chief Risk Officer (CRO) and Board Risk Committee Composition (BRCC. Enterprise Risk Management Index (ERMI) measured ERM implementation. Firm Size (F. SIZE) represented by Total Assets and Firm Age (F.AGE), represented by total years of operations, served as control variables. Using the expo-facto research design and the census sampling technique, relevant secondary data about all 37 insurance companies that were in operation during the study period (2012 – 2022) was collected from published financial statements and the regulator's reports. The multiple regression analysis revealed that while CRO and BRCC contributed positively to ROA but not at a statistically significant level, ERMI had a negative effect on ROA. The research confirms that ERM adoption only is not sufficient to influence profitability. For better results from ERM, an industry-wide review of implementation practices by NAICOM is recommended.

KEYWORDS: Enterprise Risk Management (ERM), Chief Risk Officer (CRO), Board Risk Committee Composition (BRCC), Return on Assets (ROA)

INTRODUCTION

At the root of many business failures is the failure to recognize, appreciate and effectively manage risks. Risks are generally described as the likelihood of unfavorable outcomes such as financial losses, failure to meet goals, and even loss of lives. Enterprise Risk Management (ERM) emerged in the late 20th century to address the complexities of the modern business environment and the associated risks and business failures. The success and shortcomings of ERM as a risk management strategy have been studied by scholars, corporate managers, and professionals, leading to numerous articles and research papers. Anton and Nucu (2020) identified four broad methods used to measure ERM engagement namely: Employing or the hiring announcement of a CRO or an equivalent position as a suggestion for ERM engagement, looking by keywords for evidence of ERM in databases like Lexis, Nexis, and Dow Jones, Using ERM ratings offered by Standard & Poor's for banks and insurance companies, and Surveying firms to find the degree of ERM implementation.

However, results of empirical research on ERM's impact on business performance vary widely not only due to the diversity in methodology and proxy, but also because of the variety of jurisdictions in which the studies are carried out. For instance, Otero-Gonzalez et al., (2020), found that the performance of Spanish insurance companies was unaffected by the implementation of enterprise risk management. Instead, they discovered that although having a Chief Risk Officer (CRO) is one of the main indicators of ERM adoption, it might actually worsen overall financial health while also having a negative impact on financial performance.

Conversely, Jurdi & AlGhnaimat, (2021), like others, found that ERM had a favorable impact on financial performance by reducing risk and increasing premiums collected, based on a study listed insurance companies in Ethiopia. Furthermore, it has been observed that many of the studies do not make a distinction between ERM adoption and implementation. Evidently, there is a difference between the adoption and implementation of an intervention or initiative. Adoption involves a company's formal decision to use an intervention, while implementation involves its integration into the business. (Jean-Jules & Vicente, 2020). Lack of distinction between these two is likely to result in variation in findings and conclusions. Despite their relatively small contribution to Nigeria's GDP (less than 1% in 2022), insurance companies are vital for national economic growth and development because they are financial "first responders"; restoring claimants to their pre-loss positions as quickly as possible. In addition, insurance companies help to mitigate risks by sponsoring and promoting loss-preventing activities and personnel. Furthermore, there is empirical evidence that activities of insurance companies, reflected by gross claims payments, is positively correlated to economic growth (Apergis & Poufinas, 2020).

To continue to play their role in economic growth and development, insurance companies need sustained profitability for financial stability, as sustained profits not only allow them to pay claims, they are also able to generate investment funds, and attract new clients. Failure on the other hand, can have severe financial system consequences (ECB, 2021). It is therefore, against this background that this study seeks to examine the effect of enterprise risk management (ERM) on the profitability of insurance companies in Nigeria.

Statement of the Problem

Results obtained from the research studies reviewed, revealed a mixed bag of outcomes. While several of the researchers such as (Olayinka et al., 2017), Luthfiyanti and Dahlia, (2020), Jurdi and AlGhnaimat (2021), Jinadu (2022, and others established a significant, positive relationship between ERM and financial performance, others like da Silva et al., (2019) and others observed negative relationships from their studies. The research thus addresses the issue of restrictive and narrow ERM measurement in previous research studies in which ERM engagement is often assumed to mean implementation. By so doing, it contributes to filling the gap occasioned by the paucity of research literature on ERM within the domain of the Nigerian insurance industry.

Research Objectives

The main objective of this study is to examine the effect of enterprise risk management (ERM) on the profitability of insurance companies in Nigeria. Its specific objectives are to:

i. Investigate the effect of the Chief Risk Officer (CRO) on the Return on Assets of insurance companies operating in Nigeria
ii. Evaluate the effect of the composition of the Board Risk Committee on the Return on Assets of insurance companies operating in Nigeria.

Research Hypotheses

On the basis of the research objectives, the following hypotheses were formulated to guide the research study:

H_{01}: The Chief Risk Officer (CRO) has no significant effect on the Return on Assets of insurance companies operating in Nigeria

H_{02}: The Composition of the Board Risk Committee has no significant effect on the Return on Assets of insurance companies operating in Nigeria

LITERATURE REVIEW

Concept of Enterprise Risk Management

Many scholars and practitioners have defined enterprise risk management since the COSO introduced its framework in 2004. Enterprise risk management is defined by Hayes, (2022), as a strategic, company-wide approach to risk management. He describes it as a "top-down strategy that aims to identify, assess and prepare for potential losses, dangers, hazards, and other potentials for harm that may interfere with the goals and operations of an organization and/or result in losses. According to Kumar, (2021), ERM is a risk management architecture that links risk management across the organization and is said to be the "enabler of companywide risk management". Further, he describes it as an integration of corporate strategy into the company's risk management strategy. The National Institute of Standards and Technology in its 2023 glossary provides a robust definition of ERM: The methods and processes an enterprise uses to manage risks to its mission as well as to establish the trust required for the enterprise to support shared missions. It involves the identification of "mission dependencies on enterprise capabilities, the identification and prioritization of risks due to defined threats, the implementation of countermeasures to provide both a static risk posture and an effective, dynamic response to active threats; and it assesses enterprise performance against threats and adjusts countermeasures as necessary". These, and other definitions establish ERM not only as a process but also as a strategy. And just like responsibility for overall corporate strategy rests with the board, ERM ownership starts with the board at the top of the ladder, while implementation is the responsibility of the Chief Risk Officer (CRO). One other interesting dimension of ERM highlighted by Kumar; is that it ensures a fusion of risk objectives with risk cultures such that risk management is not only owned at the top but is built into the activities of every functional area and cascaded down through the various functional heads and across the entire organization.

Measures of Enterprise Risk Management

Chief Risk Officer

A key component of a functional risk framework, according to the COSO framework, is having a Chief Risk Officer (CRO) position within the organisation. Although the Board is given ownership and accountability for Enterprise Risk Management under the COSO structure, the Chief Risk Officer is ultimately responsible for carrying out the Board's daily mission. The Chief Risk Management Officer (CRO) is a person who oversees the assessment of enterprise risks and threats to the company's profitability and capital, as well as devising strategies to reduce those risks (Pratt et al., 2021). As Hayes, (2022), observed, the role of a CRO is a constantly evolving one, especially as companies continue to adopt new technologies and business practices. As such, companies seek persons who not only have several years of experience in law, accounting, economics, or actuarial science to fill the role, but they also look out for strong interpersonal and analytical competencies. The CRO is regarded as one of the most important members of a management team because the CRO works with senior management to develop and implement ERM strategies and policies and to create a healthy risk culture. Al-Farsi, (2020), concluded that the CRO plays a key role in the adoption and implementation of ERM. Li et al. (2022) noted that while hiring a CRO lowers company risk and boosts operational effectiveness, the influence on performance is greater when the CRO is strong. As a result, companies operating in situations that are dynamic or litigious will yield stronger returns from a CRO. More so, when compensation is tied to performance (Da Silva et al., 2019)

Board Risk Committee

Bearing in mind that Enterprise Risk Management is more than a method for managing risk; it is a strategy, ownership, and responsibility for success rests squarely on the board of directors. Moreover, given the continuous evolution of the business environment, risk and risk-taking take a central place in the minds of boards of directors and is no longer a matter of mere operational necessity, but a governance issue (Brownstein et al., 2018). Board Risk Committees are made up of members of the board, established by the board with clear reporting procedures and scope of authority to provide oversight over the management of risk in the company. According to Brownstein et al. (2018), the idea that board committees' responsibilities stop with monitoring and do not include ongoing risk management is supported by both law and practise. The board's oversight, through its risk committee, guarantees that senior management's risk management policies and procedures align with business strategy and risk appetite, that they function as intended, and that the required steps are taken to establish a risk culture that promotes suitable risk awareness, behaviour, and judgement. Many risk committee attributes, such as the committee's size in terms of members, gender diversity in the membership, members' degrees of expertise, and members' thoroughness, are identified by Odubuasi et al. (2022), as having an effect on implementation. Recent publications also mention members' tenure, qualifications, independence, and participation at meetings (Onipe & Ishaku, 2022). Other than the matter of independence, the COSO ERM framework does not mandate the configuration (size, gender, qualifications, etc) of the Board Risk Committees in detail, and research findings show that practice varies with industry. Diversity in committee makeup is believed to enhance the settlement of potential difficulties since it deploys unique viewpoints, as noted by Khalik & Sum (2019), In the Nigerian insurance industry, the observed industry pattern is a minimum of three committees.

Enterprise Risk Management Index (ERMI)

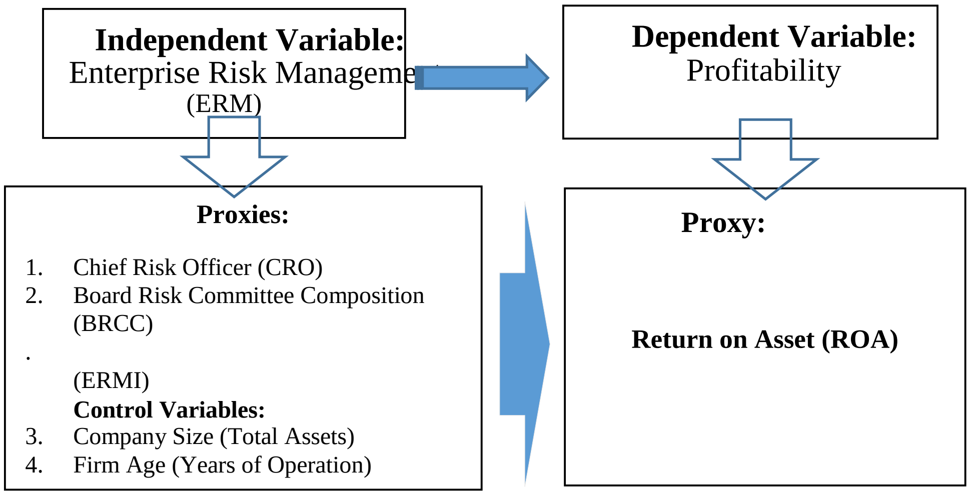
As previously mentioned, it is critical to consider ERM's implementation as well as adoption when assessing the impact of the practise on business performance. Despite differences in the component variables and methodology employed, numerous academics have measured the application of enterprise risk management (ERM) using the Enterprise Risk Management Index (ERMI). For instance, Ali et al., (2019), looked through numerous reports for phrases that indicate the existence of ERM and simply utilised 1 and 0 to show the presence and absence of ERM, respectively. Using the number of items revealed in accordance with the ERM standards, Erin Olayinka et al. (2019) created the ERM index. Horvey & Ankamah (2020) used a more robust method for creating the ERMI: the index was built using the presence or otherwise of the title of the Risk Manager, ERM adoption, Risk management committee, Risk department, Board of director independence, Auditor type, and Risk plan Drawing from the work of previous researchers and NAICOM's guidelines on risk management, ERMI is constructed in this study using the presence or otherwise of each of these component variables identified from the COSO ERM framework: a Board Risk Management Committee, an Independent Board of Directors, and the type of Audit firm.

Profitability (Return on Assets)

Return on assets (ROA) is a profitability metric that shows how much profit a firm can make from its assets. In other terms, return on assets (ROA) assesses the effectiveness of management in generating a profit from a company's financial resources or assets on its balance sheet. The more effectively a company's management manages its balance sheet to produce profits, the higher the value displayed for ROA, which is expressed as a percentage. (BoyteWhite, 2023)

Firm Size and Firm Age

In this study, firm size is measured in terms of total assets while firm age is depicted by the number of years since commencement of operation till the date of the study. Firm size is employed as a control variable to give stability to the research model as measures of firm size are typically robust in sign and statistical significance (Dang et al., 2018). Moreover, each of the ERM proxies used bear relevance to firm size. Firm age is used because of its unique character of influencing other variables without being influenced itself. In addition, it has tendency to produce a non-linear U-shaped relationship when measured against variables such as firm performance depicting the liabilities of newness at first, and the liabilities of old age later on (Coad et al., 2017).



Theoretical Review

This study adopted the agency theory as the theoretical bedrock for this study. Agency theory is primarily an economic theory, though it is now applied in diverse fields of study. It focuses on the relationships that exist between a set of self-interested individuals (O'Donnell & Sanders, 2003) in which one party (the principal) delegates some decisionmaking authority to another (the agent) who in turn is responsible for maximizing returns on the principal's investment in return for an agreed remuneration (Putra, 2017). As a principle, agency theory is used to explain and resolve the issues that arise in the principal-agent relationship such as exists between shareholders as principals, and company executives as agents (Kopp, 2022).

Originally put forward as the agency theory of corporate governance by Alchian and Demsetz (1972) and Jensen and Meckling (1976), agency theory begins by highlighting assumptions that border on rationality, contractual obligations, and informational conditions, and then proceeds to address the problems of "hidden characteristics" and "hidden actions" of principals and agents respectively (Tan, 2014). (Linder & Foss, 2015). In other words, the areas of dispute addressed in agency theory are differences in goals and differences in risk aversion. Principals on the one hand seek long-term earnings and growth from moderate risks while agents tend to pursue huge short-term profits with less consideration for the level of risk (Kopp, 2022).. Accordingly, agency theory views the firm as a "set of contracts among self-interested individuals" (O'Donnell & Sanders, 2003)

Agency theory is adopted as the theoretical bedrock for this study because ERM, as revealed in literature places a whole lot of responsibility on the board of directors and its delegates such as the board risk committee and the chief risk officer. Thus, ERM serves as a governance tool for supervising the activities of executives thereby reducing agency related issues and costs. Proponents of agency theory recommend that executive compensation be tied to shareholder value. They also propose back-loading of their compensation so that the time lag between the decisions they take and the consequences of such decisions ensures that they focused on longterm strategic results which form the basis of their compensation. A third solution is to set executive targets that cut across various units of the organization so that they are compelled to pay attention to organizational goals, not just personal or departmental objectives, a concept that is central to ERM's ethos.

Empirical Review

Results obtained from the research studies reviewed, revealed a mixed bag of outcomes. While several of the researchers such as (Olayinka et al., 2017), Luthfiyanti & Dahlia, (2020), Jurdi & AlGhnaimat, (2021), Jinadu, (2022, and others established a significant, positive relationship between ERM and financial performance, others like da Silva et al., (2019) and others observed negative relationships from their studies. Other researchers yet like González et al., (2020), and Phan et al., (2020), no relationship between ERM on financial performance

The study of the effect of ERM on firm value by da Silva et al., (2019) was done using Chief Risk Officer (CRO) as the proxy of ERM as well as data from publicly quoted insurance companies in the U.S over the period 2009 to 2017. The research threw up an unusual outcome: a negative relationship between ERM and firm value. That is to say, the participation and influence of the CRO were not enough to increase firm value in insurance companies. They however did find a positive relationship between CRO compensation and firm value. In a study with a similar outcome in which the effect of Enterprise Risk Management (ERM) on the performance and the financial stability of a sample of non-financial Spanish-listed companies was studied by Luís et al, (2020), data was sourced from the Spanish stock exchange while credit risk theory was adopted as the study's theoretical framework. The variables employed include ROE, ROA, VAR, ZScore, Tobin's Q, Hedging Price, Hedging Credit, Hedging Exchange, Risk Map, and CRO while Fixed and Random Effect and GMM were employed as the estimation technique. The findings revealed that having a chief risk officer (CRO) can reduce financial performance, although it can improve the degree of financial health measured as the distance to default In a departure from negative findings with negative relationships.

González et al., (2020), studied the effect of ERM (Enterprise Risk Management) on the performance and financial stability of non-financial listed companies using the presence of a CRO, Risk map, ISO 31000, and COSO frameworks as proxies. Credit risk theory was used as a theoretical framework. The formulated hypotheses were that the adoption of ERM positively affects the performance of Spanish companies.

In another study with a similar finding, Egberi, (2022), evaluated the effect of ERM on the firm value of listed Nigerian oil and gas companies using risk monitoring committee as proxy for ERM while Tobin's Q, earnings per share and earnings yield were used to measure firm value. Enterprise risk management theory and COSO's ERM framework provided the theoretical base for the study. The study made use of panel data on which regression analysis was performed using the fixed and random effects method. He concluded that risk monitoring committee does not affect firm value, particularly for listed Nigerian oil and gas firms.

METHODOLOGY

This study made use of the expo facto research design and a census population sampling technique which captured all the 37 insurance companies in operation within the 10-year study period, 2012 – 2022, with the exception of takaful and re-insurance companies. The study period covers the inception of mandatory adoption of ERM by Nigerian insurance companies, but stops before the COVID-19 pandemic year which exposed the industry to unusual dimensions of risk and business losses. Secondary data was collected from the annual reports of the companies, as well as publications by the National Insurance Commission and the Nigeria Insurance Association. Multiple regression analysis was performed on the data collected using the SPSS software. The null hypotheses tested are that the chief risk officer, composition of the board risk committee, the enterprise risk management index, firm size, and firm age all have no effect on the return on asset of insurance companies in Nigeria.

Thus, the structural multiple regression equation is defined thus: $ROAit = \beta 0 + \beta 1CROit + \beta 2BRCCit + \beta 3ERMIit + \beta 4FSize\ it + \beta 5FAge\ it + \varepsilon\ it$ as adapted from Avetisyan, (2019) and Cioacă et al., (2020) The items in the equation are defined as follows: ROAit = Return on Assets (Dependent Variable), β0 = Constant of the Linear Equation, CROit = Chief Risk Officer, BRCCit = Board Risk Committee Composition, ERMIit = Enterprise Risk Management Index, FSizeit = Firm Size, FAgeit = Firm Age, εit = The Model's Error Term, B1, β2, β3, β4, β5= Regression Coefficient of each Explanatory Variable

RESULTS AND DISCUSSION

Results of descriptive and regression analysis are presented in Table 1 and Table 2 below

Descriptive Analysis

Table 1: Descriptive Data

	ROA	CRO	BRCC	ERMI	F. SIZE (Log)	F. AGE
Mean	0.025	0.42	1.72	1.54	7.27	33.78
Median	0.032	0	2	2	6.99	29.00
Mode	(0.036)	0	2	1	6.99	21.00
Std. Deviation	0.085	0.49	0.45	0.93	7.53	16.70
Kurtosis	7.98	(1.91)	(1.020)	(0.84)	1.80	(0.76)
Skewness	(0.44)	0.32	(0.99)	0.016	0.85	0.54
Largest	0.58	1	2	3	8.60	71
Smallest	(0.39)	0	1	1	5.62	2
Population	370	370	370	370	370	370

Source: Author's Computation, November 2024

Table 1 provides a summary of the descriptive analysis of the variables used in the study and provides useful insights on the how ERM affected ROA during the study period. The mean represents the central position in the dataset. The ROA mean of 0.025 indicates that average profitability of Nigerian insurance companies within the period is in the positive region, and a standard deviation of 0.085 shows how close the ROA values are to the mean despite the wide disparity between the largest and smallest (0.58 and -0.39). Kurtosis is a statistical measure of the tailedness of the distribution and points to how often outliers occur. The kurtosis of 7.98 for ROA is considered high since it is greater than 3 and confirms wide disparities in the profitability of the insurance companies. The negative values of the ERM measures, CRO, BRCC and ERMI indicates a flatter than normal distribution curve and shows the values fall within a more predictable band. Skewness measures the asymmetry of the distribution and a negative skewness of 0.44 and 0.99 for ROA and BRCC respectively means more of the values are medium to large, while the fewer, smaller values form the left tail of the distribution curve.

Regression Analysis

Table 2: Multiple Regression Report

	Multiple Regression Analysis						
	Coefficients		**Std. Error**	**T**	**pvalue**	**Collinearity Statistics**	
						Tolerance	**VIF**
Predictors	(Constant)	0.360	0.084	4.265	0.001		
	CRO	0.044	0.033	1.326	0.186	0.809	1.235
	BRCC	0.034	0.037	0.906	0.366	0.760	1.315
	ERMI	(0.166)	0.033	(3.497)	0.001	0.774	1.292
	F. SIZE	0.707	0.039	18.321	0.001	0.914	1.094
	F. AGE	0.041	.031	1.334	0.183	0 .952	1.050
R	0.728						
R^2	0.530						
Adjusted R^2	0.524						
F-statistics	82.209						
P-value	0.001						
Durbin-Watson	1.524						
Dependent variable: Return on Asset (ROA)					*significant at 5%		

Source: Researcher's Study, November 2024

From the regression table above, the estimated model is as follows:

$ROAit = \beta_0 + \beta_1\ CROit + \beta_2 BRCC_{it} + \beta_3\ ERMI_{it} + \beta_4 FSize_{it} + \beta_5 FAge_{it} + \varepsilon_{it}$

ROA = 0.360 + 0.044CRO +0.034BRCC + (-0.116) ERMI + + 0.707FSize + 0.041FAge

The result of the multiple regression analysis presented in Table 4.2 indicates that CRO, BRCC, ERMI, F. SIZE and F. AGE affect the return on asset. This is indicated by the parameters of the coefficients, which are β1 = 0.044, β2 = 0.034, β3 = -0.116, β4 = 0.707, and β5 = 0.041 respectively. While CRO, BRCC, F. SIZE and F.AGE all affect ROA positively, ERMI has a negative effect. However, the effects of CRO, BRCC, and F.AGE were not statistically significant with p-values of 0.186, 0.366 and 0.183 respectively. With a value of 0.530 (53.0%), the model's coefficient of determination (R-squared) showed that variations in ROA can be explained by the independent variables, CRO, BRCC, ERMI, Firm Size and Firm Age. The remaining 47.0% is explained by other factors extraneous to the model.

Discussion

The results of the multiple regression analysis carried out showed that the effect of ERM measures on the profitability of insurance companies in Nigeria is varied the findings specifically summarised as follows:

i. CRO which measured ERM adoption, has a positive coefficient of 0.044 and thus has a positive effect on ROA though with a p-value of 0.186, the effect was found not to be statistically significant.
ii. Similarly, BRCC which also measured ERM adoption, was found to have a positive effect such that each unit increase in ROA was accounted for by 0.034 units of BRCC but with a p-value of 0.366, the effect could not be said to be significant.

These findings are similar to those of Phan et al., (2020) and González et al., (2020) who also found the effect of ERM on firm performance to be insignificant. It is however at variance with studies by da Silva et al., (2019), Witjaksono & Sari, (2021), and others on one hand, and those of Odubuasi et al., (2022), Shad et al., (2022), etc, on the other who found the effect of ERM on firm performance to be negative, and positive respectively at statistically significant levels. This finding should be of interest to the regulator as it aligns with those of previous studies that pointed at regulatory compliance as a catalyst for ERM adoption and the consequent tendency for superficial engagement (Adeyele & Maiturare, (2021), Grammenidis & Hiebl, (2021).

CONCLUSION AND RECOMMENDATIONS

Conclusion

This research study examined the effect of ERM on the profitability of insurance companies in Nigeria. It revealed that while the appointment of a CRO, and the composition of a risk committee which represent ERM adoption did not have a significant effect on profitability, ERM implementation had a significant negative effect thus underscoring the fact that adoption does not necessarily infer implementation. The study confirms the notion that the use of ERM can be superficial, especially when it is required for regulatory compliance. Thirdly, the research raises concern about the effectiveness and efficiency of the implementation of ERM by Nigerian insurance companies.

Recommendations

Based on the conclusion draw above, the following recommendations are made as regards ERM adoption and implementation by the Nigerian insurance industry.

i. NAICOM should ensure that adoption of ERM by insurance companies is done in the spirit of its objectives, not just the letter. Only persons who meet predetermined requisite risk management skill and experience may be appointed CRO. They should also have an acceptable level of demonstrable independence, and a portion of their compensation tied to corporate risk performance
ii. In the same vein, it is recommended that NAICOM steps up its oversight with respect to the composition and activities of board risk committees. With the exception of smallsized committees with only three members, each committee should have at least two truly independent directors, or one director, if such a person is the chair
iii. There is a need for an industry study of ERM implementation practices to establish critical success factors and impediments. The regulator should facilitate and encourage trainings, workshops and peer reviews to help improve implementation

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EFFECT OF PERSONAL INCOME TAX ON INTERNALLY GENERATED REVENUE OF TARABA STATE

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Abstract
This study analyzes the effect of personal income tax on internally generated revenue (IGR) of government in Taraba State. It also identified the components of IGR, as well the relationship between personal income tax and government revenue in the state. Panel data were used from secondary source retrieved from Taraba state board of internal revenue. The variables estimated were PAYE, Direct Assessment and Road Tax for the period of 2014 to 2023. Descriptive statistic and Multiple regressions were used to analyze the components of Taraba state revenue (PAYE, Direct Assessment and Road Tax. Findings indicated that PAYE and Direct Assessment had positive and significant impact on Revenue generation of the government in Taraba state while Road tax had positive but insignificant impact on state revenue. It was concluded that Personal Income Tax has positive and significant impact on internally generated revenue profile of government in Taraba state. It is now recommended that government should embark more on strict enforcement of personal income tax in order to bring more taxable entity into the tax net most especially direct assessment and Road tax which in the long run increases revenue of the state looking at the current dwindling prices of oil in the international market.

Key words: Direct Assessment; PIT; Road tax; araba state government; IGR;

INTRODUCTION

Government budgets at both state and federal levels are inundated with high borrowing as the major means of financing government expenditures. There has been dwindling Internally Generated Revenue (IGR) at all levels of government in Nigeria as only three out of the thirty-six states of the federation are capable of raising adequate revenues from IGR that can cover the states' financial obligations. IGR, the income that accrues to the State and Local Governments from within as a result of their internal efforts as opposed to allocations received centrally from the federation account includes personal income taxes (PAYE and Direct Assessments), road tax, fines and fees, licenses, stamp duties, land registration and survey fees, rents of government properties, interest repayment/dividends and reimbursement refunds (Abiola & Ehigiamusoe, 2014).

As at date, the constitution clearly allowed the collection of personal income tax, Capital Gains Tax and Stamp duties at state level as enacted by the laws of the national assembly. According to Agu (2011), allocations from the federation account has partly helped government officials to pay little attention to growing the economic base that would help the states to become fiscally independent. National budgets are prepared having oil bench price as the principal budget limiting factor. This has plunged the nation into deficit budget in recent time when the crude oil price that rose to 110 Dollars per barrel in 2014 later fell to as low as 48 Dollars per barrel within a year precisely in November 2014.The serious decline in price of oil in recent years has led to a decrease in the funds available for distribution to the three tiers of Governments in Nigeria, hence an urgent need for state governments to look inward in terms of revenue generation to augment the reduced income being shared from the federation account. This need underscores the eagerness on the part of state and local governments and even the federal government to look for new sources of revenue or to become aggressive and innovative in the mode of collecting revenue from existing sources.

The importance of taxation in the activities of any government cannot be overemphasized. Generally, in Nigeria the law of Personal Income Tax is of tremendous importance as a source of revenue for the government. This importance assumes an accelerated dimension, in the face of the present economic recession in Nigeria (Akintoye, 2013; Asabor, 2012; Oduh, 2012; Angahar& Sani, 2012.). Personal Income Tax is also a weapon, which could be used to reduce inequality in society, encourage manufacturing industries, by the use of tax incentives, and discourage undesirable industries (Akintoye, 2013; Asabor, 2012; Oduh, 2012; Ariwodola, 2000; Angahar, & Sani, 2012; Okpe, 1998). But the law on Personal Income Tax in Nigeria has many defects. These contribute a great deal in preventing the law from achieving its desired objectives.

Tax can be imposed as an instrument for economic management. For example, it can be used to reduce or increase the money in circulation during inflation or deflation, as industries can be more easily protected with the use of tax. This can be done by increasing tariff on imported goods and services. The consumption and production of certain goods and services can also be checked with the use of tax (Agbetunde, 2010). Overall, tax is viewed as a compulsory levy imposed by the government through its various agencies on the income, capital, or consumption of its subject (Mustapha, 2010). From these few explanations, it could be seen that the payment of tax is not a voluntary exercise. Rather it is compulsory on all taxable individuals and corporate bodies.

Direct tax is a form of tax assessable directly on the tax payer who is required to pay tax on his income or profit while indirect tax is imposed on commodities before they reach the final consumer and is paid by them upon, not as taxes, but as part of selling price of the commodity (ICAN, 2006). Personal income tax (PIT) which forms part of direct tax refers to all taxes or levies imposed on the income, salaries and wages, profit, gratuities, etc., of individuals as well as interest and dividends from companies accruing to them. This tax is further divided into two categories: Pay As You Earn (PAYE) and direct assessment tax (Mohammed, 2007).

PAYE focuses on the income of individuals as a result of employment and the employee's income are taxed using a graduated scale. The tax calculated is usually deducted at source and is done by the employer who will then remit the amount to the tax authorities. The second category, direct assessment tax, is a tax imposed on the income of an individual as a result of self-employment. This category of income tax covers income from trade, business, profession, or vacation. The payment of this tax, however, occurs after the individual has collected his/her gross income and filed in a return on the gross income.

Ekpe (2012) depicts that direct assessment is one of the systems of personal income tax based on the proportion of the taxable income of self-employed persons from trade, business, profession or vocation. The self- employed persons are expected to render returns of their annual income at the beginning of each year to the relevant tax authority. A self evaluation is usually done by the individual, or corporation sole from which the tax authority calculates the tax liability of the individual or corporation sole. This is usually referred to as self-assessment.

Road tax refers to a tax compulsory paid on wheeled vehicles using public roads. All states require an annual registration fee for vehicle owners in order to permit the usage of such vehicle on roads. The road tax levy varies from state to state which depends on vehicle kinds, and also based on the capacity, engine, and categories of vehicle. These categories of vehicle are passenger cars, taxis, lorry, truck, bus, motorcycle, tractors, van and tricycle. Annually, the vehicle owners, which based on engine displacement, and manufactured years, pay annual road tax to government so that their contribution are felt by the government for effective discharge of fiscal roles (Adegbite and Azeez, 2021).

In a tax system, responsibility is assigned to three key entities: the tax payers whose obligation is payment of the assessed taxes promptly and correctly, tax authorities which ensure the collection of taxes for the government and the government whose duty is the imposition of taxes to finance the activities that ultimately benefit the citizens. Thus, the tripartite constituents of an effective tax system include tax administration, policy and law (Olaofe, 2008). With the recent reduction in the collection of revenue from the oil; which is the main source of the federation account, there is the need for all the three tiers of government to look inwards.

Generating revenue internally however, it will be absolutely difficult for the government to meet the need of the society in terms of expenditure (both recurrent and capital) in the face of dwindling allocation from the federation account which has been occasioned by the falling oil price in the global market. Tax seems to be a main focus of the administration to generate revenue to achieve its aim, but to what extent are the people willing to comply with this new tax drive? Compliance with payment and filing of all required tax returns at the proper time and that the returns accurately reporting tax liability in accordance with the Internal Revenue code, regulation and court decisions applicable at the time the return is filed. This clearly states the line between tax compliance and noncompliance; yet, tax compliance requires adequate record keeping. Consequently, a taxpayer can fail to comply either because he has made an honest mistake while filling his tax form, or because he wanted to evade his tax liabilities from the beginning. Whether the taxpayer made an honest mistake or intentional omission, the result is the same. For this reason, noncompliance includes situations where individuals underpaid or overpaid their taxes, called underreporting or over-reporting (Awuhe & Tyoakosu, 2016). Hence, this study evaluated the analysis of personal income tax on the internally generated revenue of Taraba state government to assess whether personal income tax has significant contribution to the State internally generated revenue or otherwise.

The main objective of the study is to evaluate the analysis of personal income tax on internally generated revenue of government in Taraba State. Other specific objectives are to:

(i) Aanalyze the effect of PAYE (pay as you earn) on the internally generated revenue of Taraba State Government

(ii) Estimate the effect of Direct assessment on the internally generated revenue of Taraba State Government

(iii) Assess the effect of road tax on the internally generated revenue of Taraba State Government

LITERATURE REVIEW

Pecking Order Theory

This study is anchored on the Pecking Order Theory popularized by Myers and Majluf (1984) together with the law of increasing state activities. According to this theory, firms and government authorities prefer internal funding over external funding. It holds that, in case organizations require external funding they would prefer debt over equity, and equity is generated as last resort. So the firms do not have predetermined or optimum debt to equity ratio due to information asymmetry. The organizations adopt conservative approach when it comes to dividends, and use debt financing to maximize the value of firm. In corporate finance, pecking order theory postulates that the cost of financing increases with asymmetric information. Financing comes from three sources, internal funds, debts and new equity. Companies prioritize their sources of financing, first preferring internal financing, and then debt, lastly raising equity as a “last resort”. Hence, internal financing is used first; when it is depleted, then debt is issued; and when it is no longer sensible to issue any more debt, equity is utilized.

This study adopts the pecking order theory since government, when faced with fund raising issues, seeks to raise its funds internally than to resort to external financing, like debt (government borrowing). The internal approach of fund raising by a government is mainly through the imposition of taxes more equally, conveniently, and economically on the income of its citizens (both corporate and individuals), which has huge potentials to impact positively on the IGR.

Empirical Review

Gwa and Kase (2018) examined the contribution of tax revenue on the economic growth of Nigeria. The first objective of this study was to examine the contribution of petroleum profit tax (PPT) on economic growth of Nigeria, the second was to examine the contribution of Value added tax (VAT) on economic growth of Nigeria and the third was to ascertain the contribution of company income tax (CIT) on economic growth of Nigeria. The study predominantly used secondary source of data. These data were time series, and data was collected from CBN statistical bulletin and Federal Inland Revenue Service. The study covers the period from 1997 to 2016. Ordinary least square of multiple regression models was used to ascertain the contribution of independent variables on dependent variable. The finding revealed that there is a significant contribution of Company Income Tax (CIT) and Value Added Tax (VAT) on the economic growth of Nigeria. The finding also revealed that there is no significant contribution of Petroleum Profit Tax (PPT) on the growth of the Nigeria economy.

Akhor et al. (2016) examined the impact of indirect tax revenue on economic growth in Nigeria. The study uses value added tax revenue and custom and excise duty revenue as independent variables and economic growth was proxy with real gross domestic product as the dependent variable. The study employ secondary data collected from Central Bank of Nigeria statistical bulletin for the period covering 1993 to 2013 for the empirical analysis using the convenient sampling techniques. The research design is time series and the data were analyzed using descriptive statistics, correlation, unit root test, co integration test and error correction model regression. The result revealed that value added tax had a negative and significant impact on real gross domestic product. In the same vein, past custom and excise duty had a negative and weakly significant impact on real gross domestic product. The Error Correction Model (ECM (-1)) coefficient had a correct negative and statistically significant sign. This shows that short-run deviation can be quickly corrected. The Durbin-Watson value indicates the absence of autocorrelation in the model. The study therefore recommended that tax administrative loopholes should be plugged for tax revenue to contribute immensely to the development of the economy since past value added tax and custom and excise duty had a significant impact on economic growth.

Siyanbola et al. (2014) assessed the roles that internally generated revenues play in the administration of state governments in Nigeria, using Ordinary Least Square (OLS) Regression method to analyse the relationship between internally generated revenues and subventions from the Federation over a period of 10 years. Their study found a positive relationship between the independent and dependent variables, indicative of the fact that internally generated revenue has a major influence on total revenue of the state government. They recommend that the state government should intensify its efforts in deepening the sources of its internally generated funds, and should not depend on federal government statutory allocations and other external funds. Similarly, (Olusola, 2011) investigated the impact internal sources of revenue have on total revenue in the various states in Nigeria. The ordinary least square method was adopted using multiple regression analysis and panel data regression methods to test the fixed and random effects at 1% level of significance. It was found out that rates, fines, fees, licenses, and rents were significant taxes impacting on internally generated revenue at the local government level in Ogun State.

Samuel and Tyokoso (2014) assessed the impact of taxation on revenue generation in Nigeria, attention is given to FCT and some selected states. The study is also aimed at highlighting the concept and nature of taxation, objectives of taxation, classification of taxes, Nigeria’s major taxes and other issues that relate to taxation. In achieving the objective of the study, the researcher adopted primary and secondary sources of data to present and analyze the information for the study. The testing of hypotheses was done using regression analysis via SPSS version 17.0. The research discovered among others that, taxation has a significant contribution on revenue generation, taxation has a significant contribution on Gross Domestic Product (GDP) and tax evasion and tax avoidance have a significant impact on revenue generation in Nigeria. The research recommends among others that well equipped database on tax payers should be established by the Federal, State and Local Governments with the aim of identifying all possible sources of income of tax payers for tax purpose, the tax collection processes most be free from corruption and embezzlement and stringent penalties should be meted by the federal, state and local governments to people who evade and avoid tax payments in order to discourage tax evasion and tax avoidance.

Oseni (2013) examines the proportions of internally generated revenues to total revenues of states for a five-year period (2007-2011). Data were sourced from the annual reports of the Central Bank of Nigeria for the period. Descriptive statistics was used and it was found that states getting additional revenue from the statutory allocations as derivation have lower proportions of IGR to their total revenues than the others. States where insurgency has been widespread have the lowest IGR for the period. Dependence on the statutory allocations by the states does not necessarily translate to good dividends of democracy as internally generated revenues can better be relied upon for development. The paper recommends, among others, that the right parameters should be instituted in order to identify the tax payers and the types of businesses they are engaged in. So also the impact of other sources of revenues like stamp duties, levies and fees should be surveyed.

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Mohammed (2007) studied the impact of Direct Assessment Tax on the level of internally Generated Revenue in Zamfara State, using Chi square, tables and percentages to arrive at the conclusion that Direct Assessment Tax has no significant impact on the performance of Zamfara State internal revenue and recommend a task force to be created to be responsible for the collection of Direct Taxes in the state. (Mohammed, 2008) in her study on Assessment of Personal Income Tax in Kaduna State using Chi- Square for analysis, shows that Direct Assessment Tax is not effective. The paper recommends, among other things, holistic reshuffling of the staff of the Board, computerizing the system and ensuring that there are proper and up to date data on direct assessment tax payers in the state.

METHODOLOGY

The objective of this paper is to assess the revenue generated by the state boards of internal revenue through personal income tax. The study used panel data from secondary sourced retrieved from Taraba state board of internal Revenue. The data collected are in respect of the period 2014-2023 on the internal revenue generated by Taraba state Government. Mean and standard deviation were used to analyse the components of Taraba state government revenue, while multiple regression was used to analyze the effects of PAYE and Direct Assessment on Revenue generation in Taraba state Government

Model specification

The model made use of internally generated Revenue in Taraba state as the explained variable while the explanatory variables are PAYE, Direct Assessment and Road tax. Since the focus of this study is the personal income tax, major indicators of the activities on internally generated funds were employed in the analysis. The functional form on which our econometric model is based is given as;

$R=f(\boldsymbol{p}1,\boldsymbol{p}2,\boldsymbol{p}3, \mu)$……………………………………………………………(1)

Where R is revenue generation in Taraba state as the explained variable that is dependent variable, $\boldsymbol{p}1$–$\boldsymbol{p}3$ are independent variables (PAYE, Direct Assessment and Road Tax).

This can be specifically stated as:

Tastrev =f(PAYEE, DIRASSS, ROATAX)…………………….(2)

$$\sum_{i=1}^{n} TASTREV = \boldsymbol{a}0 + \sum_{i=1}^{n} a1PAYEE + \sum_{i=1}^{n} a2DIRASSS + \sum_{i=+}^{n} a3ROATAX + \boldsymbol{i}=1$$ ……………………………………………(3)

RESULTS AND DISCUSSION

Summary Statistics of Internally Generated Revenue of Taraba State

The statistics for variables obtained from secondary data on Taraba state revenue reports 2014-2023 from Taraba state board of internal revenue demonstrated in Table. 1. The average personal income tax realized was 9.3136, the minimum value was 8.3984 and maximum of 10.0730 with standard deviation of 0.5167. The average tax realized from PAYE was 8.3857 with a minimum and maximum value of 7.5314 and 9.8100 respectively. The standard deviation stood at 0.5744. The variability of tax collected on PAYE is less than one-third of the mean. Similarly, the average tax collected on Direct assessment was 9.0717 with minimum and maximum value of 8.1231 and 9.8009, the coefficient of variation of Direct assessment was not large (0.5357). Furthermore, the mean Road tax was 8.4150 With minimum and maximum value of 7.672098 and 9.121176 respectively. The standard deviation stood at 0.457065.

Table 1: **Analysis of the components of Taraba state internally generated revenue**

VARIABLE	MEAN	MIN	MAX	STD
TASTREV	9.313655	8.398424	10.07306	0516728
PAYE	8.385762	7.531479	9.810031	0574476
DIRECTASS	9.071727	8.123198	9.800098	0.535711
ROAD TAX	8.415072	7.672098	9.121176	0.457065

Analysis of the Impact of Personal Income Tax Profile of Taraba State

Below is the analysis of the impact of personal income tax on revenue profile in Taraba state.

Table 1. PAYE has a positive coefficient estimate of 0.188084 and a p-value of 0.0264 significant at 5%. This indicates that PAYE positively and significantly contributes to revenue generation in Taraba State. That is, for every one unit increase in PAYE, there is a predicted increase of 0.18% on revenue generation of Taraba state. Direct assessment has a positive coefficient estimate of 0.624683 and a p-value of 0.0000 significant at 1%. This indicates that Direct assessment positively and significantly contribute to revenue generation of Taraba State. That is, for every one unit increase in tax from Direct assessment, there is a predicted increase of 0.62% on the revenue generation of Taraba State. Road tax has a positive coefficient estimate of 0.184431 with insignificant contribution to Taraba State revenue generation with p-

value of 0. 1124. This finding indicates that Road tax was statistically insignificant but with a positive coefficient of 0.184431. Also implies that, for every one 1% increase in the collection of Road tax, there is a predicted insignificant increase of 0.18% in Taraba State revenue generation.

Table 2: **The Regression Result of the Impact of Personal Income Tax on Revenue Profile in Taraba State**

Variables	Coefficient	Std-Deviation	T. Statistic	Probability
Constant	1.358529	0.474156	2.865155	0.0168
PAYE	0.188084	0.072270	2.602504	0.0264
DIRETASS	0.624683	0.089273	6.997417	0.0000
ROAD TAX	0.184431	0.105969	1.740421	0.1124
R-squared	0.918071			
Adjusted R squared	0.908492			
F-statistic	101.0646			
Prob (F-statistic)	0.000000			
Durbin-Watson Stat	2.364073			

Discussion of Result

The coefficient of determination gives 0.9680 or 96% meaning that the regression model is approximately 96% significant, hence a variation or increase in the dependent variable (Taraba State Revenue generation) is 96% attributable to the changes or increase in the independent variables (PAYE, Direct Assessment and Road Tax). This result is also supported by the high value of the adjusted R2, which is to the tune of 95%. The F and probability statistics also confirm the significance of this model. This indicates a positive and significant contribution of revenue from PAYE and Direct Assessment with positive but insignificant contribution from Road tax

CONCLUSION AND RECOMMENDATION

Conclusion

The study analyzes the effect of personal income tax on internally revenue generation in Taraba state, specifically on PAYE, Direct Assessment and Road tax. From the results of the findings, it showed that there exists positive and significant revenue generation from PAYE and Direct Assessment with a positive but insignificant tax revenue realization from Road tax.

Recommendation

Based on the findings and conclusion of the study, it is recommended that government should embark more on strict enforcement of personal income tax in order to bring more taxable entity into the tax net most especially direct assessment and Road tax which in the long run increases revenue of the state looking at the current dwindling prices of oil in the international market.

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ENVIRONMENTAL ACCOUNTING PRACTICES AND CORPORATE PERFORMANCE OF SELECTED OIL AND GAS FIRMS IN NIGERIA

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Abstract
In this study, the performance of ten (10) out of thirteen (13) Nigerian oil and gas companies was examined in relation to environmental accounting practices between 2015 and 2022. The study adopted existing data from the financials of selected firms. An ex-post facto research design was employed in the study, and the analysis was carried out using simple linear regression. The study made use of environmental management costs (EMC) as proxy for environmental accounting practices and sales revenue (SAR), return on capital employed (ROCE) and net profit margin (NPM) as indicators for corporate financial. Findings reveal environmental accounting practices have significant positive effects on both sales revenue and return on capital employed, while the effect on net profit margin, even though positive, was insignificant. The theoretical framework of this study is the performance improvement theory (PIT), which states that firms are generally involved in sustainability accounting for the reasons of improved performance, benefit drivable through good reputation, and cost reduction. The study concluded that environmental accounting practices contributed to the firms' performance. Nigerian oil and gas firms were selected. Therefore, this study concluded that environmental accounting has a significant positive effect on the financial performance of selected oil and gas companies. It is therefore recommended, among others, that corporate organisations extend their management accounting and financial reporting systems to environmental accounting as a way of ensuring long-run corporate sustainability. It also recommends that these companies be cost-effective and efficient when planning environmental activities to improve companies' performance.

Keywords: Environmental accounting, corporate performance improvement theory, environmental management costs, environmental protection costs, Nigeri**a.**

INTRODUCTION

Industrial activities that have the potential to seriously harm both living things and inanimate objects have proliferated in the current corporate climate. The environment, which is essential to human existence, has been greatly impacted by industrial activity. Environmental sustainability is in jeopardy due to corruption of natural resources such as air, water, land, greenhouse gasses, climate, energy, ecosystems, and biodiversity. The idea of environmental accounting had to be included into the reporting system because the environment has made a significant contribution to the survival of economic activity. Companies can accurately evaluate the costs and advantages of implementing environmental conservation measures by using accounting for the environment (Schaltegger & Burritt, 2000) According to a study by Amedu, Iliemena, and Umaigba (2019), the majority of manufacturing companies in Nigeria don't provide environmental information. As a comprehensive component of sustainability accounting and reporting, environmental accounting produces reports that include environmental data for stakeholders' external use as well as internal management decision-making.

Nigerian companies do not have access to environmental accounting rules or environmental disclosure guidelines for communicating with various stakeholder groups. Nevertheless, the government has made some efforts to improve environmental sustainability in Nigeria through the enactment of acts and laws. These include the National Environmental Standards and Regulations Enforcement Agency Act of 2007 and the Environmental Impact Assessment Act of 2007. Corporate entities that use environmental accounting, however, follow some guidelines derived from the Global Reporting Initiative (GRI). In order words, there is no mandatory requirement for quantitative or qualitative disclosure of (financial) environmental accounting information in annual reports neither under the Companies and Allied Matters Act (CAMA) nor as per International Accounting Standards (IAS's) or International Financial Reporting Standards (IFRS). Furthermore, there is no mandatory Stock Exchange listing requirement for Nigerian companies, to disclose environmental accounting information although the Nigerian Stock Exchange in its recent Guideline (2018) issued on sustainability reporting advised the disclosure of corporate environmental events. Hence, disclosure of environmental accounting information in Nigeria is more of voluntary reporting which does not encourage environmental accounting. Studies conducted by Amedu, Iliemena and Umaigba (2019) reveal that environmental sustainability reporting information is not value-relevant.

Murray (2010) argues that it is illogical to assume that companies would invest in social and environmental benefits if they knew there would be no financial gain. Supporters contend that higher expenses related to environmental accounting and disclosure hurt the reporting company's bottom line. Numerous studies have shown that the majority of earlier research focused on industrialized nations, with relatively few on developing nations like Nigeria. Also, the majority of these studies have reported mixed results. Studies such as Falope, Offor, and Ofurum (2019); Okafor (2018); Oti and Mbu-Ogar (2018) found a positive relationship between environmental accounting and corporate performance while studies like those of Charles, John, and Umeoduagu (2017); Oraka and Egbumike (2016) found a negative relationship between environmental accounting and corporate performance. Hence, the inconsistency in previous findings calls for further investigation. In order words, our present study seeks to specifically provide answers to the below questions;

1. What is the effect of environmental management cost on sales revenue?
2. How does environmental protection cost affect return on capital employed?
3. To what extent does environmental research and development cost affect net profit margin?

This study is therefore aimed to determine the effect of environmental accounting on corporate performance. The following specific objectives are designed to:

1. Assess the influence of environmental management costs on the performance of selected oil and gas firms in Nigeria;
2. Examine the relationship between environmental protection costs and performance of selected Oil and Gas firms in Nigeria; and
3. Evaluate the effect of environmental research and development costs on the

performance of selected Oil and Gas firms in Nigeria.

LITERATURE REVIEW

Conceptual Review

Environmental Accounting (EA)

Environmental Accounting (EA) is the process of adding environmental costs to a company's accounting records. In order to enhance managerial decision-making, control, and public disclosure, EA is a system that offers a common framework for companies to identify and account for past, current, and future environmental costs, according to KPMG and UNEP (2006). The terms environmental management accounting, corporate social accounts, social accounting, and social and environmental accounting have all been used to refer to environmental accounting (EA) in various literary works (Cooper, Taylor, Smith, & Peterson, 2005). These, however, have not altered the meaning because they are all focused on measuring environmental expenditures. An organization can better measure the effects of its activities on the host community by implementing the practice of environmental accounting. This includes both the costs and benefits that are generated during an accounting period in addition to the expenses that are incurred. Information about environmental accounting includes details on how chemicals produced during production are treated, labor costs (which are included in salaries and wages), disposal costs, costs and savings associated with fines and penalties, regulatory fees, maintenance costs, costs associated with moving to more environmentally friendly methods, costs associated with materials, etc. Firms use environmental accounting differently based on the activities conducted during the time and the management choices made for the appropriate components of cost information. The following are the two sorts of information that environmental accounting activities essentially produce:

Environmental Accounting

Management accounting information information

(Internal information) information)

Stakeholder Accounting

(External

Fig. 1: Categories of Environmental Accounting Information

Environmental Management Cost

Environmental management costs include those incurred for external communications, like the disclosure of environmental information, as well as those associated with managing environmental preservation initiatives and indirectly lowering environmental impacts on corporate operations. The costs associated with establishing an environmental management system, publishing environmental information and engaging in environmental advertising, keeping an eye on environmental effects, educating staff members about environmental concerns, and funding environmental improvement projects are some of these. The costs of environmental remediation are unforeseen expenses related to the restoration of environmental damage brought on by commercial activity. These include provisions or insurance payments to cover environmental deterioration, the costs of covering degradation suits related to environmental conservation, and the cost of restoring the natural environment to its original state.

The term remediation costs refers to the total cost of any actions or activities used to clean up or remove hazardous materials from the environment, prevent or minimize their continued movement, leaching, or migration, prevent, minimize, or mitigate their release or threatened release into the environment, as well as any harm or damage resulting from such a release, and comply with any applicable environmental laws. The costs associated with environmental remediation encompass a range of expenses, including but not limited to those related to legal, engineering, or other consultant services; investigation, testing, sampling, and monitoring; boring, excavation, and construction; removal, modification, or replacement of equipment or facilities; labor and material; and appropriate storage, treatment, and disposal of hazardous materials ((Okudo, Mbonu & Amahalu, 2021).

Environmental Accounting in Nigeria

Through the Ministry of Environment and Natural Resources, the Federal Government has created a number of environmental legislation in an effort to increase environmental disclosure by companies. Limiting the release of toxic substances into the environment; outlining the waste-generating requirements that industries and facilities must meet; mandating that establishments create plans for handling unexpected and accidental discharges and devising waste reduction strategies; requiring the installation of facilities capable of reducing or eliminating pollution resulting from production activities; and defining the upper limits of effluent parameters that can be released into the air, streams, rivers, drains, and ground. However, the problem with Nigeria is not the enactment of laws and regulations but the implementation of these laws and regulations.

The need for Environmental Accounting Practices for oil and gas companies in Nigeria

Nigeria faces significant obstacles in containing environmental deterioration because it is a developing country with an abundance of natural resources (oil and gas products). Because of gas flaring, industrial pollution, oil spills, deforestation, global warming, and other linked health concerns, oil exploration activities have decreased the quality and utility of life. The sale of crude oil and its byproducts brings in enormous sums of money for the nation every day, but one would normally believe that this money, if managed well, should have a major influence on the growth of both the oil and non-oil producing regions of the nation.

The researcher notes that although though a vast majority of the country's resources are obtained from the oil producing communities, the majority of these people nevertheless live in extreme poverty. Multinational corporations frequently overlook the importance of being socially and environmentally conscious when mining crude oil and its byproducts from these areas. Not only are the hydrocarbons released into the atmosphere during oil spills or leaks harmful to humans, but they also pose a threat to other living things, including plants, animals, and aquatic creatures. The pollution these corporate entities produce makes it often exceedingly difficult for the communities that produce oil to live in harmony with the environment. Mabogunje (2007) lists the following pollutants: azylene may harm a developing fetus's liver, kidney, skin, eyes, and bone marrow; benzene may cause leukemia and birth defects upon chronic exposure; ethylbenzene may cause dizziness, slower reflexes, loss of consciousness, and death.

It is impossible to overstate the effects of environmental contamination on the host communities. The question of whether multinational corporations are making every effort to guarantee that the host communities' quality of life is improved makes sense in light of the stakeholder approach. These include giving the communities clean drinking water to replace their already contaminated water, building good roads to promote community development, constructing schools, health care facilities, and electricity, giving job opportunities to the local indigenous population, and, lastly, making sure that environmental control measures are sufficient and compliant with national and local legal requirements. According to Henderson and Pierson (2004), social and environmental accounting and reporting is a component of sustainable development that reflects concerns about the preservation of the environment, equality between generations, and the planet and its resources.

For oil producing corporations, environmental expenses make up a portion of their overall production costs. These expenses are assessed and quantified through the use of environmental accounting. In light of growing environmental rules and rising fines and penalties for environmental infractions, a company may suffer if environmental accounting is disregarded. In addition to aiding in the management and control of environmental costs, the accounting system's integration of environmental costs will enhance the reporting entity's standing since stakeholders are becoming more conscious of the risks associated with their processes. In-depth environmental accounting and disclosure practices are required given the turn of events. There is need to bring to the fore, the overall effect of this practice on corporate performance. Nigerian companies are expected to build in environmental policies as part of their corporate policies. This will give environmental accounting drive and aid in controlling their operations. The environmental activities carried out throughout an accounting period can provide the data required for environmental accounting. A company's environmental initiatives follow its environmental policy, which will aid in accomplishing the organization's main objective. This is illustrated in Table 1.

Table 1: Environmental Initiatives for Environmental Accounting Information

COMPANY	ENVIRONMENTAL POLICY	ENVIRONMENTAL INITIATIVE
CONOIL PLC	Emphasizes highest concern and commitment for the health and safety of employees, customers, neighbours.	Customized training programmes, awareness campaigns, and safety and security audits.
ETERNA PLC	Maintenance of good quality relationship with communities bygood safety health, environment, and security policies. in all their operations.	Investments in clearer energy products to complement global efforts to reduce emissions and damage to the environment
JAPAUL OIL PLC	To consider risk at every stage of development, and continuously work to manage environmental impacts.	Environmental management process which identifies environmental and social aspects, evaluates social and regulatory settings, conduct environmental and social risk assessment, apply environmental and social aspects.
MRS OIL NIGERIA PLC	Conducting of its business in a manner that protects people, property and the environment.	Prevention through constant risk assessments and appropriate risk management. Involvement in promotion of safe and healthy working environment.
OANDO PLC	Continuous development ofsystems and solutions that monitor their practices and operations in order to prevent the crystallization of environmental risks.	Compliance with regulatory standards and limits relating to water conservation, air pollution and other environmental indicators.
SEPLAT PETROLEUM	Provisions for environmental clean-up and remediation costs associated with the Group's drilling operations are based on current policies.	The company continues to enforce strict health and safety rules and practices at the work environment which are reviewed and tested regularly.
TOTAL ENERGY PLC	To ensure health and safety of people, protection of theenvironment.	Community grievance management systems on land, environment.

Source: Corporate Websites (2020).

Measuring Corporate Performance

Corporate performance can be defined as an organization's performance level at a certain moment in time. The total profits and losses or the usage of assets could be used to quantify this. The metrics used to assess an organization's financial performance are as diverse as the purposes for which they are used, claim Iliemena and Okolocha (2019). Corporate performance is evaluated to provide the shareholders with an account of the management team's leadership. The most important part of this is calculating a company's profitability, market value, and potential for expansion.

The measurement of the effect of environmental accounting on performance examines the nature of the relationship between some indicator of environmental reporting or performance with the company's Financial Performance obtained from the accounting information such as the historical audited financial statements of the respective companies. Financial performance is commonly used as an indicator of a firm's financial health over a given period of time. Measuring the impact of environmental accounting on performance involves analyzing the correlation between various environmental reporting or performance indicators and the financial performance of the company as determined by accounting data, such as the previous audited financial statements of the involved companies. A company's financial health over a specific time period is often determined by looking at its financial performance. Many factors can be used to define or quantify corporate success, including as profitability, growth in market share, gauge return, rise in turnover, return on investment, return on equity, return on capital used, and liquidity indicators.

In this study, corporate performance is measured by percentage change in sales revenue as it is expected that good environmental practices and the disclosure of environmental cost information will ultimately increase patronage, return on capital employed, and net profit margin. As noted by Iliemena and Amedu (2019), the survival of contemporary manufacturing concerns in Nigerian 21st century can be said to largely depend on the efficiency of its management. While management efficiency can be measured in a lot of ways including the profitability or reported profit, this can only be achieved through implementation of adequate policies to cut down operating costs (Iliemena & Amedu, 2019). A firm can, by being environmentally sustainable, differentiate its products and thus increase its turnover. Similarly, a firm can save costs on resources, regulatory costs, capital and labour and wherefrom increase its net profits and return on capital employed. Environmentally friendly organisations generate cost savings on environmental litigations, which also add to corporate profitability.

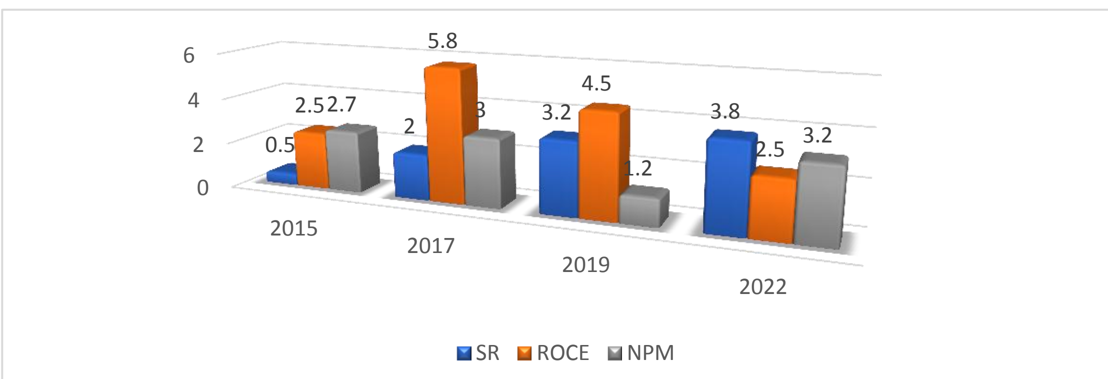


Fig. 2: Trend in Corporate Performance 2015- 2022 using indices of change in Sale Revenue, ROCE and Net Profit Margin

Source: Researcher Computation (2023).

The above figures indicate the percentage change in sales revenue for the oil and gas companies was highest in 2022. Also, the companies generated highest levels of net profit margin in 2022 while ROCE had its highest in 2017 which also fluctuated from 2019 to somewhat stable average in 2021. These changes could have been influenced by environmental accounting practices as attention to environmental impact has improved over the years. All indices are noted to have declined between 2017 and 2019. This can easily be explained as the effect of general economic downturn.

Theoretical Review

Cost reduction Theory

Every economy has a number of environmental rules and regulations that govern the activities of manufacturing companies both generally and specifically. This appears to be the driving force behind several nations where publication of environmental information is already required by law. When businesses violate environmental rules, they face penalties and fines that reduce their overall profit. Since companies are aware of the consequences of non-compliance, they voluntarily decide to follow the rules in order to avoid the negative publicity that comes with breaking the law and to benefit from their good reputation. Although enterprises may experience immediate discomfort in complying with environmental regulations, their reputation for environmental compliance motivates them to broaden their offerings to include environmental accounting and disclosure.

Performance Improvement Theory

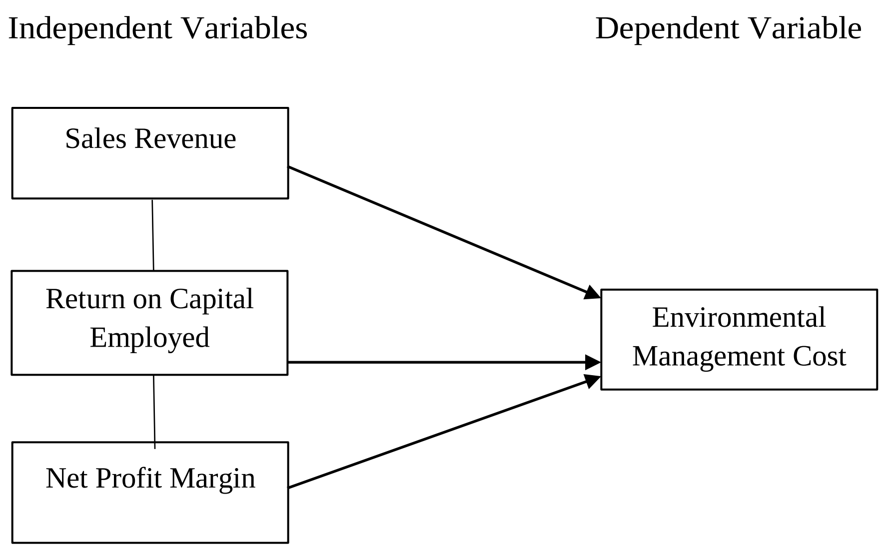
Regardless of size or industry, all businesses are business units, and their goal is to maximize wealth through profitability. Prior to the advent of environmental reporting, or even sustainability reporting from a broader viewpoint, corporate organisations operated based on their profit and mission. An organisation's environmental concern comes at a high cost, as overall overhead costs are anticipated to rise. While certain expenses may be directly related to how the business is run, others may not even be relevant to day-to-day operations. That raises the question of why companies spend billions on their environment and hire ecologists to calculate the environmental impact of their operations. According to the agency theory, a company exists for its shareholders, while the stakeholder theory views it differently. They aren't totally incorrect. When you look at this from a fundamental analysis point of view, a business exists to produce money. Given that it is seen as an independent entity, why would it engage in actions that could deplete its capital base? Based on the findings of this study, a corporate organization will prioritize environmental expenditure, considerations, and reporting for three main reasons: reputation

Reputation Theory

Environmentalists often view corporate entities that care deeply about the environment as "Good." In order to maintain the "good" image, businesses therefore start modifying their company policies. Even while a company's high reputation comes at an immediate cost, it attracts business and makes it well-known. A company's positive reputation is extended beyond its local surroundings through the dissemination of corporate sustainability information, which encompasses environmental accounting data. Over time, having a positive reputation increases market share, which raises customer spending, share prices, and the company's total market worth. These are manifested in higher sales income and a higher return on capital used. Consequently, a "sensible" business embraces environmental reporting and accounting over time.

The current research is hangered on performance improvement theory (PIT) as it states firms are concerned in sustainability accounting. The implication of this is that, environmental accounting practice of firms is not in a bid to please stakeholders but in attempt to improve overall corporate performance in the long run while winning Stakeholder good rating.

Conceptual Framework



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Source: Researcher Computation (2023).

Empirical Review

Review of studies from Developed Countries

Bewley and Li (2000) studied Canadian industrial companies' environmental declarations. Their study measured the 1993 annual report disclosures of 188 corporations using the Wiseman index, which was based on the voluntary disclosure principle. Membership in the industry served as a stand-in for the inclination to pollute. According to the study, companies are more inclined to reveal general environmental information if they have a higher tendency to pollute and if their environmental performance has received more public attention.

Tadros and Magnan (2019) investigated how environmental performance plots into environmental disclosure. A look at underlying economic incentives and legitimacy aims. The study employed a sample of firms from environmentally sensitive industries over several years and aimed at re-examining the association between environmental disclosure and environmental performance in United State. A panel data analysis was adopted to examine how the interaction between environmental performance and economic and legitimacy factors influence firms' environmental disclosures. The results suggestedthat environmental performance moderated the effect of economic and legitimacy incentives on firms' propensity to provide proprietary environmental disclosure, with both sets of incentives being influential. More precisely, there appeared to be a reporting bias based on the firm's environmental performance whereas the high-performers disclose more environmental information in the three following vehicles: annual report, 10-K, and sustainability reports combined. Results also show that economic and legitimacy factors influence the disclosure decisions of the low and high environmental performers differently.

Review of studies from Developing Countries

Corporate governance's impact on integrated reporting quality was investigated by Cooray, Gunaratne, and Senaratne (2020) through a survey of Sri Lanka. This research examined the content of 132 annual reports from public companies over a three-year period using panel multivariate linear regression. While there was a significant correlation between the size of the board and the presence of an independent risk committee and integrated reporting, the study found limited support for a corporate governance system to give stakeholders high-quality information about the process of creating value through integrated reporting. Furthermore, compared to voluntary reporting formats like integrated reporting, there was a claim that Sri Lankan corporations' corporate governance compliance needs were given more weight.

Ahmad, Waseer, Hussain, and Ammara (2018) researched into the performance of non-financial companies listed on the Pakistan Stock Exchange in regard to environmental accounting. Regression analysis (REM) was used in this study on company annual data from 2006 to 2016. The results of the empirical investigation indicated a strong positive correlation between the size of the firm and environmental accounting. However, statistical analysis revealed that earnings per share and return on capital invested were negligible.

Review of studies from Nigeria

Adediran and Alade (201) examined Return on Capital Employed (ROCE), Net Profit Margin (NPM), Divided per Share (DPS), and Earnings per Share (EPS) to examine whether there is a substantial correlation between environmental accounting and corporate performance in Nigeria. The study's secondary data came from the 2010 annual reports and accounts of fourteen (14) randomly chosen companies that were listed on the Nigerian stock exchange. Multiple regression analysis was used to analyze the data. The results show that there is a strong positive correlation between environmental accounting and net profit margin and dividend per share, and a substantial negative correlation between environmental accounting and ROCE and EPS.

Using a descriptive research design using secondary data, Olayinka and Oluwamayowa (2014) examined the collective and individual effects of company environmental disclosure on market value. 50 firms that were purposefully chosen from the Nigerian Stock Exchange made up the sample, and the correlation coefficient was used to test the hypotheses. According to their analysis, market value will increase when environmental information is included.

An empirical study on the impact of green business practices on the organizational performance of particular Nigerian manufacturing enterprises was carried out by Eboh and Chukwuka (2018). Using the Cochran (1977) statistical method, a simple random sampling procedure was employed to choose 10 manufacturing enterprises, yielding a sample size of 543 respondents. The sample was obtained from a population of 5705 individuals, comprising the middle and lower cadres of the selected manufacturing firms. With the use of linear regression analysis, the data were examined and the hypotheses validated. The productivity of the chosen manufacturing firms was found to be significantly and favorably affected by green business initiatives. This suggests that implementing green business practices, principles, and processes will have a very positive impact on the environment and the organization.

Iliemena and Ijeoma (2019) used secondary data from annual reports and accounts of 24 sampled quoted manufacturing companies to investigate the impact of sustainability reporting on the financial performance of manufacturing firms quoted on the Nigerian stock market. The research period, which corresponds to Nigeria's IFRS reporting period, went from 2012 to 2018. Regression analysis was used to assess the three proposed hypotheses at the 5% significance level. Among other things, the results show that environmental disclosure has no discernible impact on return on capital employed (ROCE). Utilizing primary data, Amedu, Iliemena, and Umaigba (2019) assessed the value relevance of the three sustainability reporting aspects and concluded that environmental sustainability reporting, an output of environmental accounting, was not value relevant. This study is, therefore, set out to fill the gaps identified and thus provide theoretical justification for the effect of environmental accounting on corporate performance.

METHODOLOGY

Ex-post facto research design was employed in the study. This research design was deployed as it permitted the examination of independent variables in retrospect for their possible relationship with dependent variables. The population of this study is made up of seven (7) oil and gas companies which are listed on the Nigerian Exchange Group (NGX) as at 31th December 2022. These are listed in Table 2.

Table 2: The Samples Selected

S/N	SELECTED COMPANIES
1	Conoil Plc
2	Eterna Plc
3	Japaul oil Plc
4	Mrs Oil Nigeria Plc
5	Oando Plc
6	Seplat Petroleum Development Company Plc
7	Total Energies Plc

Source: Researcher’s findings (2023).

Model specification

The following simple linear regression model examines the effect of the dependent variable (Environmental Accounting Practice, EAP) measured by EMC and on the independent variable (Corporate Performance, CP) measured by SAR, ROCE and NPM.

EMC=f (SAR, ROCE and NPM)

The econometric form of the model is expressed as:

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \mu$-- (1)

That is:

$EMC_{It} = \beta_0 + \beta_1 SAR_{it} + \beta_2 ROCE_{it} + \beta_3 NPM_{it} + \mu_{it}$----------------------------(2)

Where:
EMC = Environmental Management Cost
SAR = Sales Revenue
ROCE = Return on Capital Employed
NPM = Net Profit Margin
μ = Stochastic or error term
i = Firm dimension of the variables
t = Time dimension of the variables

RESULTS AND DISCUSSION

Descriptive Analysis

From Table 3, the descriptive statistics for sample firms. An examination of the results reveals that EMC showed a mean value of 0.849 therefor indicating that on the average only 85% of sample oil and gas firms practices their level of engagement in environmental accounting activities. However, the table further shows 1.9998 and -3.2230, explained in the maximum and minimum values respectively.

Table 3: Descriptive Statisstics

	EMC	SAR	ROCE	NPM
Mean	0.849270	1.380080	0.915326	0.068496
Median	0.059671	6.724559	0.011903	0.016742
Maximum	1.999843	7.140008	473.9249	5.517626
Minimum	-3.223058	51995.00	-55.61977	-5114.000
Std. Dev.	0.568285	1.589808	64.30924	0.101099
Skewness	-2.748828	1.537222	7.048497	0.713691
Kurtosis	3.156909	5.206797	1.945095	3.156924
Jarque-Bera	1018.558	33.41838	6053.477	1854.534
Probability	0.000000	0.000000	0.000000	0.000000
Sum	2.759134	7.717709	331.2583	31835774
Sum Sq. Dev.	17.76213	1.370818	227462.3	6.677613
Observations	56	56	56	56

The standard deviation measuring the spread of the distribution stood at a value of 0.568. The Jarque-Bera statistics stood at a value of 1018.5 with a probability of 0.00 which indicates that the variables are normally distributed when measure at critical level. This implies that the possibility of outlier does not exist in the distribution. An additional investigation tested at 0.05 critical level. The mean values of explanatory variables are positive. The skewness and kurtosis statistics of the variables were normally distributed as they are close to zero skewness and kurtosis of +/- 3respectively.

Correlation Analysis

Table 4: Correlation Analysis

	EMC	SAR	ROCE	NPM
EMC	1.000000			
SAR	0.079156	1.000000		
ROCE	0.479517	-0.081875	1.000000	
NPM	0.062730	0.238109	-0.061432	1.000000

Table 4 shows correlation matrix for the variables as contained in the analysis. The correlation coefficients showed a relationship between the environmental accounting practices and corporate performance of oil and gas firms in Nigeria as contained in the analysis. The significant relationship is at 95% confidence level. Results demonstrated a significant relationship between environmental accounting practices and corporate performance. The correlation coefficients also showed a positive relationship between environmental accounting practices and sales revenue, return on capital employed except for net profit margin.

Regression Analysis

Table 5: Estimation of Panel Least Square Results

Dependent Variable: EMC
Method: Panel Least Squares
Date: 12/30/23 Time: 03:29
Sample: 2015 2022
Periods included: 8
Cross-sections included: 7
Total panel (balanced) observations: 56

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SAR	0.070819	0.053152	1.332382	0.0085
ROCE	-0.001929	0.035048	-0.055030	0.0463
NPM	0.004544	0.001057	4.299625	0.0001
C	-0.784434	0.428959	-1.828690	0.0732

Root MSE	0.476285	R-squared	0.284800
Mean dependent var	0.049270	Adjusted R-squared	0.243539
S.D. dependent var	0.568285	S.E. of regression	0.494265
Akaike info criterion	1.497258	Sum squared resid	12.70347
Schwarz criterion	1.641926	Log likelihood	-37.92321
Hannan-Quinn criter.	1.553345	F-statistic	6.902327
Durbin-Watson stat	1.227362	Prob(F-statistic)	0.000534

Source: Author's Computation, (2023). Using EViews 12.

The results in Table 5. shows that the Durbin Watson statistics of 1.227 shows the absence of autocorrelation (positive) or serial correlation between the variables as the coefficient is appropriately is less than 2. The R^2 value of 0.2848 connotes 28% of the degree of variation in the environmental accounting practice is explained by the model while the remaining 72% is captured by the stochastic error term. The estimated model is statistically significant in its overall evaluation considering the significance of the Prob. (F-statistic) value (0.001).

Test of Hypotheses

H_{01}: Environmental accounting practice does not have significant effect on sales revenue of selected oil and gas companies in Nigeria.

From the analysis above, it shows that every unit increase in environmental accounting coefficients, SAR increases simultaneously indicating a positive effect of environmental accounting on SAR. The p-value 0.0085<5% significant level. Given the above result, the null hypothesis (H_0) is rejected while the alternative hypothesis (H_1) is accepted. This implied that the effect of environmental accounting on sales revenue is positive and statistically significant.

H_{02}: Environmental accounting practice does not have significant effect on return on capital employed of selected oil and gas companies in Nigeria.

The above analysis shows that for every unit decrease in environmental accounting coefficients, ROCE decreases simultaneously indicating negative effect of environmental accounting on ROCE. The p-value 0.0463<5% significant level. Given the above result, the null hypothesis (H_0) is rejected while the alternative hypothesis (H_1) is accepted. This implied that the effect of environmental accounting on sales revenue is positive and statistically significant.

H_{03}: Environmental accounting practice does not have significant effect on net profit margin of selected oil and gas companies in Nigeria.

The above analysis shows that for every unit increase in environmental accounting coefficients, NPM increases simultaneously indicating positive effect of environmental accounting on NPM. The p-value 0.001<5% significant level. Given the above result, the null hypothesis (H_0) is reject while the alternative hypothesis (H_1) is accepted. This implied that the effect of environmental accounting on net profit margin is positive and statistically significant.

Discussion of Findings

The results in Table 5 reported the effect of environmental accounting practice on sales revenue of selected oil and gas companies in Nigeria. The coefficient (0.070819) and T statistics (1.332382) disclosed a positive (+) effect. The p-value 0.0085<5% significant level. Given the above result, the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. This implied that the effect of environmental accounting practice on sales revenue is positive and statistically significant.

The results in Table 5 reported the effect of environmental accounting practice on return on capital employed of selected oil and gas companies in Nigeria. The coefficient (-0.001929) and T statistics (-0.055030) disclosed a negative (-) effect. The p-value 0.0460<5% significant level. Given the above result, the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. This implied that the effect of environmental accounting practice on return on capital employed is negative but statistically significant.

From the analysis in table 3 as reported, the effect of environmental accounting practice on net profit margin of selected oil and gas companies in Nigeria. The coefficient (0.004544) and T statistics (4.299625) disclosed a positive (+) effect. The p-value 0.000<5% significant level. Given the above result, the null hypothesis (H_0) is rejected while the alternative hypothesis (H_1) is accepted. This implied that the effect of environmental accounting practice on net profit margin is positive and statistically significant.

CONCLUSION AND RECOMMENDATION

Thus, this study concludes that environmental accounting practices have significant positive effect on corporate performance of oil and gas companies in Nigeria. The study therefore recommends that:

(i) Corporate organisations should extend their management accounting and financial reporting systems into environmental accounting as a way of ensuring long-run corporate sustainability.
(ii) Companies should aim for increased market share and corporate reputation by improving on their environmental performance to enjoy the advantages of increased revenue, return on capital investment and profitability in the face of constant competition.
(iii) More attention should be paid by government and standard setting bodies on issues of environmental concern by instituting mandates that compel firms to practice environmental accounting and reporting in Nigeria.
(iv) Also corporate organisations should be compelled to submit Environmental Impact Remedy plans as part of requirements before commencement of business. This will ensure the practice of environmental accounting from the inception of a business.
(v) It also recommends that these companies be cost-effective and efficient when planning environmental activities to improve compoanies' performance.

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FINANCIAL INTERMEDIARIES AND THEIR ROLE IN TRANSFORMING THE NIGERIAN ECONOMY: A REVIEW OF THE CONCEPT AND ITS SEGMENTS USING BOTH CUTTING-EDGE METHODOLOGIES AND TRADITIONAL DESK REVIEW TECHNIQUES

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Abstract
Financial intermediation is essential to the operation and evolution of contemporary economies because it makes resource allocation easier, encourages investment, and fosters economic expansion. This review paper offers a thorough analysis of the idea of financial intermediation, its different subsets, and its overall effects on the economy. The study synthesizes the body of literature to provide a sophisticated understanding of the mechanisms by which financial intermediaries function, using both cutting-edge methodology and traditional desk review techniques. The report highlights the many roles that established banks, non-bank financial intermediaries, and new role fintech solutions play in the financial ecosystem covering traditional banking institutions. The review provides an explanation of the advantages and difficulties of financial intermediation by utilizing theoretical frameworks, empirical research, and policy assessments. The results highlight how crucial innovative and efficient regulation are to improving the stability and effectiveness of financial systems. This study is added to the current discussion on financial intermediation by offering insights that can guide future investigations, the formulation of public policy, and the actual application of financial services in a range of economic environments.

Key words: Financial intermediation, Role, Transformation, Economy, Nigeria

INTRODUCTION

The function that financial intermediaries play in promoting economic development and progress makes them essential. They assist in reducing the common market defects of transaction costs and information asymmetries (Akhmedovich,2022). According to Ribaj & Mexhuani (2021), joint-stock corporations can obtain a range of services from financial intermediaries, including outsourcing, consulting, and underwriting. These intermediaries include banking institutions, depositories, and consulting firms. With the aid of these services, joint-stock businesses can boost their market value on the stock exchange and join the foreign stock market, increasing their equity and profitability.

According to the Schumpeterian growth model, financial intermediaries supervise entrepreneurs, fund entrepreneurial endeavors, and collect deposits from households in order to mitigate moral hazard and encourage economic progress. Intermediaries can also fill in the gaps in financial and digital literacy, facilitating financial access through programs that combine technological and human engagement. They also support the stability of the financial system and the efficient use of resources. Pareto optimality can be attained through financial intermediation by lowering the need for certain securities and providing insurance against idiosyncratic risks. The use of cryptocurrencies is growing, and it's anticipated that they'll play a significant part in the banking system, involving intermediaries to help keep tokens safe. Important components of financial intermediation also include the issuing of money by the government and the rivalry between other payment methods, including other forms of government payments.

Statement of the Problem

Financial intermediation is a process by which financial institutions act as intermediaries between savers and borrowers in the financial system. These institutions play a crucial role in facilitating the flow of funds from those who have surplus funds (savers) to those who need funds to invest or consume (borrowers). The primary purpose of financial intermediation is to channel funds efficiently from savers to productive uses in the economy. Despite the significant role played by this concept, it is important to inspect this concept, its segments and the likely impact it has on the economy using both state of the art and desk review approaches.

Objective of the Study

This piece of work aimed at reviewing the concept of financial intermediation, its segments and the impact it has on the economy.

LITERATURE REVIEW

Theoretical Framework

According to the theory of financial intermediation, the growth of intermediaries usually coincides with the expansion of the financial market. The growth of the economy is correlated with the development of the financial sector. Researchers Adekunle, Salami, and Adedipe (2015) were some of the first to propose this notion. Intermediaries, as defined by the theory, are a "coming together" of private creditors and debtors who take use of the scale economy at the level of transaction technology. In this instance, the transaction costs comprise the costs of research, evaluation, and monitoring in addition to the transfer costs for the amounts of foreign exchange.

Consequently, the function of financial intermediaries is to change the attributes (due date, liquidity, etc.) of assets; they also provide liquidity and placement diversification opportunities by qualitatively altering financial assets.

The theory is intended for organizations that accept deposits, provide insurance, and distribute money to businesses so they can make investments. Since the beginning of time, banks have been accepting household deposits and lending money to businesses that need funding. Therefore, money that is entirely or partially used for consumption does not support economic expansion. This theory is pertinent to the study because savings are mobilized through financial intermediation, among other factors that the study highlights. Financial resources are allocated by the economic agents to profitable ventures. The economic agents invest the funds in productive economic agents invest the funds in productive economic activities which yield returns and thereby boost economic growth.

According to Markjackson, Timinipre, Nelson & Okoyan (2017), the theory of financial intermediation emanated from the work of Gurley and Shaw (1960) in the 20th century, which divided the economy into the spending units and financial intermediaries. They declared that financial intermediation is based on the informational asymmetry theory and agency theory. This means that both the surplus and deficit units could not trade directly because of lack of vital information in the market between the two parties. Thus, it was a signal that the market was not perfect contrary to the certain assumptions. Consequently, they argued that financial intermediaries like banks exist to lessen information asymmetry and, hence transaction costs to enable efficient exchange between the surplus (savers) and deficit (borrowers) units.

Similarly, Birkenmaier, Kim, & Maynard (2022). observe that financial intermediaries are alliance, which deals with the circulation of information. The information for certain classes of assets, typically those related to individuals such as mortgages or insurance, which is not publicly available, can be obtained by spending resources. Yet this information can benefit potential lenders if they are available with some economies of scale. Therefore, this can only be achieved if organizations that gather and sell the information about particular classes of assets existed in an economy. For this reason, the presence of financial intermediaries acts as a natural response to asymmetric information. This means that information asymmetry is the primary reason for the existence of financial intermediaries in the financial market.

While these considerations may have historically been fundamental to the job of intermediaries, Allen & Santomero (1997) argue that the emphasis on the role of intermediaries as minimizing the frictions of transaction costs and asymmetric knowledge is overly excessive. As a result, risk management has emerged as the primary domain of intermediary activity, with little explanation provided by classic intermediation theory for why institutions ought to carry out this task. Financial intermediaries also lower the expenses associated with learning how to use markets efficiently and engaging in them on a daily basis, which is crucial to comprehending the changes that have occurred.

Depository and non-depository financial Intermediation

Travkina, Ternovskaya, & Fiapshev (2022) Two separate types of financial intermediation that are essential to the functioning of the financial system are non-depository and depository financial intermediation. Although they both entail the transfer of money between savers and borrowers, the financial tools and processes employed are different. Financial services including insurance, credit cooperatives, and pension funds are offered by non-bank financial institutions (NFIs), which are legal organizations but are not banks. NFIs support the growth of the financial industry in Ukraine and are registered with and under the supervision of the National Bank of Ukraine. Although non-bank financial institutions' operations are thought to have a role in the rise in investment in the Russian economy, structural and institutional issues must be resolved in order to further their development.

Financial Intermediation through Depository: Financial intermediation through Depository involves organizations that take public deposits and offer a range of financial services. Credit unions, savings banks, commercial banks, and other financial organizations that provide deposit accounts are a few examples. Non-Depository Financial Intermediation: In this type of financial intermediation, institutions that do not take conventional deposits yet nevertheless play a significant role in facilitating the transfer of cash between savers and borrowers are involved. Investment banks, insurance providers, mutual funds, pension funds, and hedge funds are a few examples. Non-Depository Financial Intermediation carries out tasks like Investment operations, where they frequently take part in financial markets, manage investment portfolios, and purchase and sell securities, among other investment-related operations.

Financial intermediation and Microfinance banks

Contemporary researchers such as Okello Candiya Bongomin et al., (2017); King and Levine (1993); Benhabib and Spiegel (2000); Arestis et al., (2001); and Wachtel (2001) among others, show that microfinance banks can promote economic growth, especially in rural areas by increasing availability of resources through improving allocation of savings. Microfinance banks are crucial in helping deficit units, particularly those in rural areas, obtain loans by utilizing the principles of contemporary financial intermediation theory. They accomplish this by impeding savers and investors from engaging in direct trade because of the information asymmetry issue, which causes moral hazard and adverse selection in financial transactions (Akerlof, 1970). In fact, Vincent (2022) makes the case that microfinance banks can facilitate financial transactions and lower the cost of obtaining and processing information between the surplus and deficit units. As a result, resource allocation is enhanced since they assume accountability for assigned monitoring (Diamond, 1984). They have an informational edge over savers and borrowers during the intermediation process, which allows them to accomplish this. According to Miho (2019), microfinance banks obtain information from many sources that is not easily accessible in the financial sector and utilize it to grant credit to customers such as the underprivileged who lack access to traditional commercial banks.

Financial intermediation and financial inclusion

According to Biruk and Yan (2023), the concepts of financial inclusion and financial intermediation are intertwined. Financial intermediation, according to Oleksii & Medvid (2022), is the process of transferring money from savers to borrowers via financial institutions like banks and stock markets. It entails giving people and companies access to financial services like loans and investments. On the other side, financial inclusion refers to the accessibility and consumption of financial services by all individuals, especially those who are unbanked or underbanked. It strives to promote economic development, decrease poverty, and boost individual well-being. According to a number of studies, financial inclusion and intermediation have a big influence on achieving sustainable development goals, economic growth, and income inequality (Thomas, 2020).

Ishan, Fabyani**,** Chehak & Murarka (2020). Financial intermediation plays a crucial role in impacting financial inclusion by bridging the gap between savers and borrowers, channeling funds from those with excess funds to those in need of capital. These include; **Resource Allocation, Access to Credit, Savings and Deposits, Risk Mitigation etc.**

Financial Intermediation and the Supply of Liquidity

According to Khan (2018), companies retain liquid funds in case of unforeseen costs. Financial intermediaries pool partially liquid assets to provide liquidity, but their capital limits how much money they may commit in the future. Investment is inefficiently low and there is a positive liquidity premium when liquidity is tight. Bank losses cause investment to decline and the liquidity premium to rise. Credit lines are made available by financial intermediaries because they are willing to guarantee future funding at a loss. A low net worth of banks will restrict the amount of liquidity available, making it impossible for the economy to achieve perfect pooling of idiosyncratic liquidity risk. This offers a means of supplying liquidity in a countercyclical manner (Dame, 2023; Kreamer, 2022).

Financial Intermediation and Financial Technology

Cai (2018) Financial technology', or FinTech, refers to the use of technology to deliver financial solutions. The term FinTech can be traced back to the early 1990s (Hochstein, 2015, and Noula, 2012); however, the sector has only recently attracted the focused attention of regulators, industry participants, consumers and academics due to its rapid alteration of traditional financial services. Global investment in financial technology increased by more than 2,200 percent from $930 million in 2008 to more than $22 billion in 20151, further nearly doubling to more than $40 billion in 2017.

Molnár (2018) and John & Nwekemezie (2019). The way businesses engage with their customers is changing fundamentally as a result of the widespread adoption and development of technology, particularly the usage of mobile phones and the internet. The design and delivery of many banking services have steadily evolved as a result of technology and the growing use of the internet. The self-service delivery channel that enables banks to give their clients more convenience in terms of information and services is now internet and mobile banking. In addition, by lowering the initial investment and transaction costs, the internet's widespread use and new information technologies have made it easier for anyone to enter the finance industry. These modifications have accelerated the emergence of Fintechs, a new class of financial intermediaries, in the industry.

The characteristic shared by these new entrants, according to Demirguç-Kunt, Klapper, Singer, Ansar, and Hess (2018), is that they have adopted an internet-only strategy, having little to no branch system and depending mostly on other networks, primarily mobile and the internet, to meet the majority of their customers' transaction and financial needs. The emergence of new online competitors is a widespread trend that affects both industrialized and developing nations.

The disruptive nature of fintech is being embraced by financial institutions, and the academic community needs to be made aware of the importance of this revolution, reevaluate the role of finance intermediation, and help usher in a new era for the financial sector.

Credit to Private Sector and Economic Growth

According to Yang, Dongxia, Zhe, Zengji, and Deyu (2022), the term "private sector credit" refers to the financial resources (loans and advances, non-equity securities, trade credits, as well as other accounts receivable with a claim for repayment) supplied to the private sector. The real GDP's annual percentage increase over a certain period of time is known as economic growth. Although there are many definitions and metrics for assessing economic growth, the main one is the expansion of the economy's long-term productive potential, which is commonly determined by real GDP growth. According to Beck, Demirgüç-Kunt, and Maksimovic (2005), productivity is the main factor driving long-term growth.

In essence, long-term economic growth is determined by the same factors that determine productivity. From this perspective, the factors that drive economic expansion—labour, technology, and easy access to credit, among others—may enhance the quality of outputs or the efficiency with which inputs are converted into outputs. This implies that a strong, dynamic, and inclusive financial system is required in order to finance realistic economic initiatives and activities that would support economic growth and development. Access to investable funds is also necessary. This is predicated on the notion that a company's capacity for growth and productivity are enhanced when it has access to funding. According to Cong (2022), the net credit of the banking system to the private sector has an expansion impact on the money supply and vice versa.

Financial Intermediation Impact on the Economy

The role of financial intermediaries in economic development has been discussed since Bagehot (1873). Financial intermediation has a significant impact on the economy. Shocks to the total quantity of financial intermediary (FI) assets have an effect on the real GDP of the United States as well as other macroeconomic indicators (Shevchenko & Nataliia, 2022; Chatterjee, 2023). The nature of financial intermediation has evolved, with banks playing a smaller and less important role in the economy overall and market-based intermediaries playing a larger role. The relative importance of mutual funds in affecting economic outcomes is demonstrated by the fact that their influence is greater than that of pension funds. Insurance companies and shadow banks are also continuously important.

According to Odom & Temuhale (2022), financial intermediation has a significant impact on real GDP in Nigeria, although the mechanism is not perfect. It is advised to take steps to oversee the administration of bank credit. According to Yakubu, Abokor, and Gedik (2021), financial intermediation has a major short- and long-term impact on economic growth in Turkey. For a more thorough examination, a composite index for financial intermediation is utilized. Using a dynamical system model, the effect of financial intermediation on economic growth is investigated. Although they increase entrepreneurship and disperse economic opportunities, competitive intermediaries may not have a positive social influence on redistribution (Molnár, 2018).

Adusei & Afrane (2013) use seventeen years of data (1995–2011) from twelve credit union (CU) countries to examine the connection between CU financial intermediation and economic growth. The analysis concludes that there is a statistically significant positive correlation between CU financial intermediation and economic growth using the panel Generalized Method of Moments (GMM) estimate technique. Based on the information presented, the research draws the conclusion that CU financial intermediation contributes positively to economic growth. As a result, it is recommended that CU financial intermediation be actively promoted in the nations under consideration. Allen (1991), the impact of financial intermediation on the economy can be significant and can be understood through various dimensions such as:

Capital Allocation: Financial intermediaries help channel funds from savers to borrowers, allowing efficient allocation of capital. This process ensures that funds are directed towards productive investments, fostering economic growth.

Risk Diversification: Financial intermediaries enable risk diversification by pooling funds from multiple savers and lending to various borrowers. This helps in spreading and mitigating risks, making the financial system more stable and resilient.

Liquidity Transformation: Financial intermediaries provide liquidity transformation by offering liquid assets (e.g., deposits) to savers while investing in less liquid assets (e.g., loans). This enhances liquidity in the economy and supports long-term investments.

Credit Creation: Banks, as key financial intermediaries, have the ability to create credit through the process of fractional reserve banking. This expands the money supply, promoting economic activity and investment.

Interest Rate Determination: Financial intermediaries play a role in determining interest rates through the supply and demand for loans. Changes in interest rates can impact consumption, investment, and overall economic activity.

Facilitating Transactions: Financial intermediaries provide a range of financial services, including payment processing, facilitating transactions, and offering various financial products. This enhances the efficiency of the overall economic system etc.

Contemporary issues in Financial Intermediation

Al-Qadasi, Al-Jaifi, Al-Rassas, & Al-Qublani (2022), financial intermediation is currently facing several contemporary issues. The development of financial innovation has led to significant changes in the system of financial intermediation, including the emergence of new financial intermediaries and the use of digital currencies. New technologies have also resulted in the radical reduction of information transmission and processing costs, stimulating competition and organizational changes in financial markets. Also, distributed ledger technology (DLT) has the potential to fundamentally change the roles and responsibilities of stakeholders in the financial sector, potentially resulting in the disappearance of correspondent banks (Stuart, Anjan, Arnoud, & Boot, 2016).

Regulatory Changes: Regulatory changes, such as updates to banking and financial regulations, impact how financial intermediaries operate. Stricter regulatory requirements, such as Basel III, are designed to enhance financial stability but can also affect the profitability and business models of financial institutions.

Cybersecurity Risks: With increased reliance on technology, financial intermediaries face growing cybersecurity threats. Cyber-attacks on financial institutions can lead to data breaches, financial losses, and damage to the reputation of these institutions. Managing and mitigating cybersecurity risks is a critical concern.

Climate Risk and ESG Considerations: Financial intermediaries are increasingly focusing on environmental, social, and governance (ESG) considerations. Climate risk, in particular, has gained prominence as institutions assess the impact of climate change on their portfolios and consider sustainable finance practices.

Low Interest Rates: Persistently low-interest rates in many parts of the world pose challenges for financial intermediaries, especially banks. The net interest margin—the difference between interest earned on assets and interest paid on liabilities—can be compressed, affecting profitability. Institutions need to explore alternative revenue streams and risk management strategies.

Non-Performing Loans (NPLs): Economic uncertainties, especially those arising from global events like the COVID-19 pandemic, can contribute to an increase in non-performing loans. Financial intermediaries need to manage and address the risks associated with potential loan defaults.

Global Economic Uncertainty: Political and economic uncertainties, such as trade tensions, geopolitical events, and global health crises, can affect financial markets and, consequently, financial intermediaries. Adapting to changing economic conditions and managing associated risks is an ongoing concern. These issues highlight the dynamic nature of financial intermediation and the need for adaptability and resilience in the face of various challenges. Financial institutions must navigate regulatory changes, technological advancements, and economic uncertainties to maintain stability and effectively serve their customers.

Empirical Review

Stephen and Obah (2017) analyzed the impact of National Savings on economic growth in Nigeria and covering the 1990-2015 using Ordinary Least Square method of analysis. The result showed that there was a positive and significant relationship between National Savings and Gross Domestic Product in Nigeria. The study thus recommended amongst others that Government should ensure an adequate macroeconomic policy that will open up the economy in order to encourage foreign direct investment inflow and make Nigeria an export platform, where export commodities could be manufactured for established international market; Strengthen Nigeria's term of trade and induce Savings. Meanwhile Shittu (2012) in a country specific study employed a cointegration and error correction model approach to investigate the impact of financial intermediation on economic growth in Nigeria from 1970 to 2010 using the ratio of domestic credit to private sector (CPS)/nominal GDP and money supply (M2)/nominal GDP as measures of financial intermediation and real GDP represented economic growth.

The results showed that broad money (M2) was more impactful on economic growth than credit to the private sector. Other findings indicated that the last ten decades of the study saw the highest level of loans to the private sector but yet had the worst annual manufacturing growth rate. Similarly, Adekunle, Salami and Adedipe (2013) worked on financial development and economic growth in Nigeria by examining the role which the banking system plays in fostering the economic wellbeing of Nigeria. The analysis was conducted using OLS and the results showed all the independent variables were not statistically significant. Further results revealed that real interest rate was negatively correlated to growth even though the overall variables explained 74 percent variation in the GDP.

METHODOLOGY

This piece of work is a review of the concept of financial intermediation and its general impacts on the economy. Both the state of the art as well as desk review approaches were adopted where existing literature on the subject matter were sorted and reviewed. Both foreign and indigenous sources were consulted. Journal articles, textbooks, policy documents, working papers etc constitutes sources information.

CONCLUSION

The concept of financial intermediation stands as a foundation in the architecture of modern economies. Through the complex web of institutions and processes, financial intermediaries seamlessly connect savers and borrowers, playing a pivotal role in the efficient allocation of resources. As this study explored, these intermediaries undertake vital functions such as risk transformation, liquidity management, and information bridging. The continuous evolution of financial intermediation, driven by factors like technological advancements, regulatory changes, and global economic dynamics, underscores its adaptability and resilience. In a world marked by digital transformations, sustainability imperatives, and shifting economic paradigms, the study of financial intermediation remains not only relevant but imperative. As we navigate the complexities of the financial landscape, a nuanced understanding of financial intermediation serves as a compass, guiding policymakers, investors, and institutions toward informed decision-making and contributing to the overarching goals of economic stability and growth.

Financial intermediation plays a crucial role in the functioning of the economy, and its policies have significant implications for various stakeholders (Shesadri & Behera, 2023). These include but not limited to the following: Stability and Regulation, Systemic Risk Management, Financial Inclusion, Monetary Policy Transmission, Credit Market Regulation, Consumer Protection, Technology and Innovation, International Coordination, Crisis Management and Resolution, Environmental, Social, and Governance (ESG) Considerations.

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STRATEGIC COST MANAGEMENT AND REVENUE MANAGEMENT: A DESK REVIEW

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Abstract
The core focus of strategic cost management is cost and revenue management role. Strategic cost management and revenue management improvement are sacrosanct to organizational profitability and efficiency that want to compete globally, achieve sustainability, and long-term viability. Also, the paper seeks to evaluate how these cost- reduction strategies have reshaped organizational performance, cut cost inefficiencies, and reduced cost -related and other operational costs aimed at maximizing income generation and or revenue enhancement from fixed capacities. Therefore, this paper adopts a desk review methodology such as internet sources, academic journals, and reports on cost reduction strategies or strategic cost management on revenue management through the use of document analysis and literature sources approach. The use of Google scholar, Sciendo, sci-hub, and litmaps to search extant literature on the issue being discussed was employed. The justification of this method is that it provides a foundational knowledge from pre-existing data. This paper concludes that approaches to cost reduction strategies have improved revenue management and other cost-related cutting measures which have significantly impacted positively organizational long -term goals, and sustainability in a business world of competitive advantage, especially in the 21st- century contemporary context. Therefore, this paper recommends that organizational policymakers and other management strategist should seek the advice and support of all key stakeholders involved before implementation of well-tailored managerial strategies.

Keywords: Strategic cost management, revenue management, yield management, management controls system, porter's five forces, cost reduction strategies.

INTRODUCTION

Strategic cost management and revenue management are organizational models companies employed to reduce cost related data, maximize revenue and boost productivity improvement. The goal of policymaker should not be to indiscriminately reduce organizational costs but seek to improve revenue management. In the business world of competitive advantage and sustainability, improvement of operational efficiency and maximization of revenue especially in some unique industries such as airline, hotel/restaurants, casinos, tourism and hospitality, managers of every organization strive hard and determined to choose the best strategies to help its organization to achieve its strategic and set goals. Strategic cost management fits such an organization in developing and finding better and sustainable strategies that aim to bring about a competitive advantage over other competitors in the same industry. This is done by using and utilizing costs data related of a firm to identify the best strategies that result in a sustainable and competitive advantage for such firms. On the other hand, the whole idea of revenue management and its success story is the willpower of making rational and informed decisions in finding right solutions to organizational multidimensional problems, balancing fixed capacity and pricing policy".

The prime objective of this work is to examine and offer an insightful background about the association existing between strategic cost management (SCM) and revenue management system (RMS). Also, this paper evaluates how these new management strategies has shaped organizational performance, cut inefficiencies and reduced cost related has maximizing revenue from fixed capacity. The paper further explains the link between strategic cost management and revenue management practices and how informed and rational decisions should assist managers in maximizing operational performance such as cost reduction, cost control and efficient revenue management. It is against this background that this research area is chosen and conceived. The paper also aimed to review recent literature on strategic cost management and revenue management. The rest of the paper is structured as follows; section two is a review of related literature, section three is the methods and materials employed by the author to achieve the paper's aim, and finally, section four discussed the findings of the studies while section concludes this work.

LITERATURE REVIEW

Concepts and Definitions of strategic cost management

The perception of strategic cost management has been understood in various approaches in the literature of management cost accounting. An organization is said to focus on strategic importance, meaning if success and accomplishment are strategic goals, organizations might be able to competitive favorably in achieving their goals (Adeniyi, 2021). The last few decades of 21st century has witnessed increasing attention to strategic cost management. Strategic cost management knowledge and information are paramount to organization success factors because of their focal point on the more strategic use of costs, value chain analysis, and revenue maximization. These are critical factors in the success of companies in 21st century strategic cost management (Kumar & Nagpal, 2011).

Before the early 1980s, numerous studies on strategic cost management had been conducted but not much was investigated in the area of experimental findings meant to enriched researchers' indebtedness of the nature as well as the content regarding strategic cost management applications. More research evidence needs to be conducted in formulating the best hypothesis on factors that relate to strategic cost management adoption as well as their usage. Strategic cost management is one of the innovative management accounting tools employed by top managers of an organization (Cadez & Guliding 2008). However, the emphasis is that strategic cost management should not only focus on never-ending cost reduction and cost control, but on the use of managerial cost data for enhanced decision - making concerning revenue administration. This is where the task of increasing revenue lies. Of prime interest, it is imperative to improve productivity, increase customer satisfaction, and maximize profit.

Change is dynamic as they said. Therefore, transformation is an inscription of the present-day business environment that can be do without. Strategic cost management faces such a contemporary issue of change in the 21st century (Kumar & Nagpal, 2011). According to them, the biggest challenge, and opportunity facing strategic cost management policymaker (strategist) is how to define and shape its own future and the future of companies in the face of daunting obstacles. For businesses to be dynamic due to trends and changes in global markets there should be an increase in competitiveness, an increase by customer's demand and shareholders, as well as the swift development in information and manufacturing high-tech. These changes prompt about innovative and strategic ideas in the industry or sector. Furthermore, this results in the face-out of the old-style cost management due to the absence of the above peculiar attributes.

In addition, Adeniyi (2021) in his text, performance management argues that the degree of competitive rivalry in the industry might hurt the profitability performance of the firm in its entirety. Price competition, far-reaching advertising battles, sales promotion campaigns, introduction of innovative products for the market, improving after sales services, or enhancing guarantees or warranties are the various forms of competitive advantage. Competing in a global market can encourage demand market expand or diversification of market product or it can leave demand static. The result is fewer sales or revenue which might affect revenue maximization except an organization is able and willing to reduce costs and employ well-tailored strategic cost related data. At this stage, the employment of revenue management comes when an organization endeavors to trade the right products, to the right customers, at the right duration, and at the appropriate prices or costs.

Kumar and Nagpal (2011) argue that strategic cost management helps an organization to develop and find better strategies that are aimed at bringing about a sustainable and competitive advantage over other competitors in the same industry. Three objects regarding strategic cost management are identified as resources, processes and products. They assist in productivity improvement, encompassing the 3E's which are effectiveness (do the right things or job), efficiency (do things right), and economy (cost effectiveness or do it cost-effectively). Some features of these 3E's are continuous improvement, breakthrough, quality product, customer delight and or satisfaction, and revenue enhancement. To recap, the philosophy behind strategic cost management is not all about reducing costs alone but its focus should be on productivity improvement, revenue management because reducing cost in one activity level could shift costs to another activity (Duci, 2021). In addition, a fundamental concern to top managers should be: do I understand the causes of cost? (cost drivers), and how do I drive the highest possible productivity through the firm?

The concept applicable to strategic cost management and revenue management is the "matching concept". This accounting concept emphasizes that revenue and costs are recognized in a period as earned or incurred, not as money is received or paid, and matched with one another. In other words, revenue and costs must be matched against the same reporting period earned or incurred. This is the crux of the matching concept. Since the goal of every organization is to increase profitability, hence making informed decisions will greatly help to attain that organizational goal and aim (Kumar & Nagpal 2011). To achieve this revenue management drive, (Yeoman, 2024) argues that an enterprise should think of selling the right product to the right customer at the right duration for the right price or cost, with a view to revenue maximization from the products sold.

In his view, Duci (2021) defines strategic cost management as a strategic use of cost-related information and principally one of the four steps of the strategic management course. According to him, the idea is mainly to differentiate strategic cost management from managerial accounting. In the same vein, Wilson (1995) affirms that the whole idea of strategic cost management is to reduce unit costs of products repeatedly in real terms over the long run. To achieve this aim, managers must have strategic oversight, aptitude, and managerial skills to identify the significant cost structure of the organization and then apply conscientious effort to reduce such unit costs of products. According to Cooper and Slagmulder (1998), strategic cost management as the use of cost management techniques concurrently aimed at improving organizational costs and cost reduction. Therefore, strategic cost management should include all facets of production, product delivery, the supply of purchased materials, product design, and the manufactured goods.

Thus, strategic cost management should characterize each stage of a product's life cycle, that is the development, manufacturing, distribution, and the product life span. Strategic cost management is a discipline that seeks thrilling opportunities for cost accountants of industries. A firm must be ready to compete in the areas of cost, quality of product, and customer service (Kumar & Nagpal,2011), as well as flexibility with reducing cost and contributing to an improved strategic position for global competitive advantage and sustainability of long-term businesses (Cooper & Slagmulder, 1998). Studies by Shank and Govindarajan (1992), describe strategic cost management as the utilization of cost related data to execute the following; assist in policy formulation and transmit strategies; carry managerial policies that implement those strategies; develop and implement controls that monitor success targeted at achieving strategic goals. Aptly, strategic cost management can be understood as the managerial use of cost information aimed mainly at one or more of the four phases of strategic management cycle.

Strategic Cost Management and Management Control Systems

Kumar and Nagpal (2011) in Govindarajan (1993) look at strategic cost management as "the organization use of cost data directed at any of the four stages of strategic management, which includes; mapping strategies, communicating and collaborating those strategies within the organization, developing and carrying out policies to implement the strategies, and finally initiates and implement management controls in monitoring the realization of organizational objectives". Therefore, management control systems should be considered ultimately as organizational tools geared towards implementing management strategies. However, organizational strategies differ in different types (Shank, & Govindarajan,1992). Management controls should be tailor-made to the requirements of specific strategies. Management controls system (MCS) are tools employed to implement these strategies.

The rationale behind linking controls to strategy is built on the following schools of thought:

(i) For effective execution, different strategies require different task priorities, different key success factors, and different skills, perspectives, and behaviors

(ii) control systems are performance measurement systems (PMS) with an impact on an individual's behavior whose activities are being measured on well -defined action plans to accomplish these goals.

Michael (2013) argues that strategic cost management cannot be actualized without the support of key stakeholders such as company employees, top managers, and information management system (IT). This is so because an organizational structure that incorporates effective and timely communication is a requirement for eventual cost strategic management implementation. In furtherance to this, strategic cost management seeks to create a win/win scenario and to transmit effectively the rewards for all stakeholders involved. To achieve this, strategic cost management considers the value systems, or value chain analysis, organizational philosophy, and employee projection, changes in business processes and how core and operational activities are performed, and the need to be backed and sustained by the introduction of incentives and other non-monetary schemes. Anderson (2007) looks at strategic cost management as a main goal of a firm, which strives to enable cost approximation of a product or service with the firm's strategy and maximize its strategic performance.

Contributing to this debate, Guan, Hansen, and Moven (2009), maintain that strategic cost management is useful to both individuals and firms in the use and application of data related to the costs of an enterprise by identifying the best strategies that result in a sustainable and competitive advantage for each firm. The emergence of strategic cost management is fundamental in attaining and sustaining strategic and competitive advantage through long-term expectation and cost formation, cost structure, and cost behavior patterns for products, processes, and resources (PPR). Similarly, strategic cost management encompasses the ability to identify products, processes, and resources as creative objects in achieving a strategic competitive advantage (Kumar & Nagpal, 2011). The whole idea of strategic cost management begins with the idea of research and development expenditure (R&D) and design phases of the product to avoid the costs incurred early in the product life cycle. To attain this strategic position, sustainable and competitive advantage, the choice of three key strategies by a firm is crucial namely; cost leadership strategy, product differentiation strategy and focus driven.

Strategic Cost management versus Strategic management accounting

The concept of strategic cost management is simultaneously interchanged with cost management accounting (Duci, 2021). The originators of SCM are Shank and Govindarian in 1989 who first research on strategic cost management. During that period, it was reported that editors of the article correctly referred to the SCM as part of SMA. Reasonably enough, there are clear differences between the two terms. The comparison between traditional cost management and strategic cost management can be seen from table 1.0 below and in the following ranking:

Table 1: Similarities between cost Management accounting and Strategic cost management

S/N.	Cost Management accounting	Strategic cost management
1.	Customer demand	Customer demand
2.	Global competition	Global competition
3.	Technology advances	Technology advances
4.	Shareholder demands	Shareholder demands

The analysis in Table 1 shows that both cost management accounting and strategic cost management shared similar attributes during the 20th century but with a paradigm shift in strategic cost management towards the 21st century in the following unique areas:

(i) improve the strategic position
(ii) improve customer satisfaction
(iii) cost/value revenue/risk
(iv) improve productivity and maximization of organizational profit.

The core focus of strategic cost management is cost and revenue management role. The following questions are pertinent and worth considering. There are:

(i) How should cost be reduced?
(ii) Why reducing cost?
(iii) Where should the cost be reduced
(iv) What is the impact and value on cost reduction?

In other words, there are called the forces of change and cost management -primary concern in the 20th century advocated by McNair (2000).

Table 2: Comparison between Traditional Management cost accounting versus Strategic cost management

Item	Management ***accounting***	***Strategic cost management***
Focus	Internal	External
Perspective	value added	value chain
Cost analysis obj.	product-customer-function with focus on valued added	various stages of value chain value-added narrow concept
Cost Analyst	score-keeping attention directing Problem solving	Design of cost mgmt. system changes, cost leadership strategy, product differentiation
Cost Driver concept	a single cost driver	Multiple cost driver: structural Drivers such as scale, scope, experience, technology etc. Executional cost drivers: participative mgmt. TQM.
Cost containment	Cost reduction e.g. responsibility centers	Cost containment is a function of Cost drivers (e.g. value activity).
Primary Concern	Cost impact	Cost/value & revenue
Key discipline	Finance/Accounting	Marketing/economies

Primary Role	Score-keeper	Analyst & consultant
Management Resp.	Follower/reactive, risk –averse	Leader/proactive, comfortable with ambiguity

Modified from (Fischer 1993, Shank and Govindarajan 1993 and McNair 2000)
Source: (Kumar & Nagpal, 2011).

Analysis from Table 2 shows that the traditional cost management accounting faced many criticisms and therefore, there was an urgent need for a proper transition from cost management to strategic cost management which is more innovative and competitive in nature. However, (Duci, 2021) also looks at their comparison from a different perspective. He compared their similarities, contrasted their differences, underlying philosophies, concepts, objectives, and application of methods and techniques in respect to strategic management accounting (SMA) and strategic cost management (SCM).

Similarities

Strategic management accounting and strategic cost management shared same data from management accounting system perspective which is related to cost function. Both concepts are basically for strategic decision-making for a competitive firm. In the same vein, both SMA and SCM focus on external users. Both concepts are basically for strategic decision making for a competitive enterprise. Likewise, both concepts focus externally.

Theory/Concepts

The fundamental theory of strategic management accounting (SMA) is Baumol's theory by an economist Lancaster, while strategic cost management uses the two generic strategies; which are value chain analysis, porter’s five forces model. In addition, SCM also uses activity-based costing (ABC) approach developed by Kaplan. According to (Adeniyi, 2021), porter’s five forces look at the causes of competition in an industry or sector which can significantly impact on the levels of product and which can be sustained in that industry either negatively or positively in the long-run.

Objective

In terms of objective, uses broad contributing to strategic decision making. whilst strategic cost management uses specific -determining and maintaining the firm's competitive position.

Method/Techniques

Strategic management accounting uses consumer life period, ABC approach, critical pricing or costing, trademark evaluation, consumer convenience, the cost of life series or cycle, benchmarking, strategic estimation costing or pricing, objective costing, estimation cost of consumers or assets, pricing and convenience chain value cost etc. while strategic cost management uses value chain; analysis of cost drivers, competitive position.

Revenue Management and Yield Management

According to Kalaitan et al. (2023), every business unit considers the effectiveness of revenue management strategy as a critical factor that relatively affects the profit of that organization. To improve the efficiency and efficacy of revenue management be it an airline, hotel, restaurant or other service industry, top management needs to make informed business decisions in terms of strategic planning and business operations. In the same manner, managers need to evaluate the effectiveness of new strategies, tactics, and emerging business technologies that enhance profitability performance.

Yeoman, (2024) argues that "managing revenue successfully is contingent on the ability of making decisions and proffering solutions to complicated problems, balancing capacity as well as pricing strategy". Interestingly, revenue management is a perfect model strategy for industries that engage in marketing perishable goods such as divan nights and airlines seats on a particular time. In the same vein, Alrawadieh et al. (2021) support that revenue management systems were implemented in service -rendering businesses dealing with perishable products, including hotels, and not only applicable in the airline transportation industry. Long and Belobaba (2023) defines the revenue management approaches for segmented continuous pricing and examine their likely impacts on streams of revenue from airliner industry through simulations in the passenger origin–destination Simulator (PODS). Maia et al. (2023) state that the application of revenue management gained its root from the early 1990s' and since it has expanded to other activity-based areas including hospitable places and catering services.

Maia et al. (2023) emphasized that managers aim to maximize revenue requiring the right approaches and procedures incorporated by the revenue management. According to Tri Djoko Sulistiyo et al. (2024), the concept of revenue management is to manage demand from customers using its four strategic elements which are; market segment, time duration, capacity and price policy. Therefore, revenue management strategies measure the achievement of revenue per available room in addition to the level of room income. That is to say, revenue management is a model employed to sell the right inventory or goods to the right customers at the right time and at the right place (Baskoro & Herlina, 2023). In maximizing income, not only increasing occupancy rates but also optimize selling prices or room rates by reducing cost units (Tri Djoko Sulistiyo et.al., 2024). Hence, the major purpose of revenue concept is to manage the demand for firms operating with fixed capacity in a way that maximizes total profit. Citing the work of Belobaba and Wilson (1996), Marcus and Anderson, (2008) argue that an early simulation -based study of the impact of revenue management practice is about competition witnessed in the airline industry.

According to Osmanoglu, and Demirciftci, (2023), revenue management is a concept that emerged in the US in the late 1970s and revenue management was influenced by the de regulation of the airline industry. With this development in the airline industry, many companies gain entrance into the local market resulting in increased and tense competition in both domestic and international air transportation undertakings. These industries applied seat capacities and prices accurately in the revenue management system, resulting in a significant increase in revenues of 5%-7%. Paguirigan, (2022), supports that the applicability of revenue management systems was later adopted and implemented by manufacturing companies where growth seems to continue. The underpinning theoretical foundations of modern revenue management systems are laid down in the studies of K, Littlewoods where the goal was set to maximize airline revenues by segmenting consumers and manipulating tariff costs.

Research conducted on different aspects of revenue management of service companies reveals that researchers employ two terminologies revenue management and yield management concurrently. However, studies show that most writers do not differentiate between these concepts. On the contrary, Kalaitan et al., (2023), uphold that a few scholars such as R. Weatherford and S. E Bodily, S.Netessine and R. Shumsky, S. Shoemaker and T. Gorin attempted to explain the key differences between yield management and revenue management. Clarifying more on these differences, Paguirigan (2022), argue that revenue management influences customer demand for an organization's product and services with the use of different pricing strategies, and other tailored made techniques aiming at selling the right product or provision of services to the right customer at the appropriate time.

The implementation of revenue management was first introduced by the airline industry and since then its application has been extended to other industries, including manufacturing companies where growth seems to be never-ending. The primary focus is on solving barriers of fixed capacity, perishable inventory, segmentation, time -varied demand, and high fixed demand cost (Nyaga, 2023). Maia et al. (2023) connect revenue management strategy to golf courses, casinos, resorts, and entertainment events and not just to airline, hotel, and restaurant businesses. Sometimes revenue management and yield management are interchangeably used but the two concepts are slightly different in nature and usage. Since revenue management is in the domain of restaurant industry, it is imperative to explain the concept of restaurant revenue management.

Commenting further, Maia et al. (2023) define revenue restaurant management (RRM) as the process of selling at the right place, at the right price and with the right duration". Some of the common and most important features for the application of revenue management techniques include fixed capacity, perishability, variable demand over time, a cost structure and segmentation of markets. A successful revenue management strategy ought to offer a variety of prices for different market segments (Maia et al., 2023).

On the contrary, yield management encompasses a range of management techniques consisting of a well -defined pricing strategy with the goal of profit maximization while providing services and marketable products. One of the suitable indicators for the effective performance of operations and performance measurement of restaurant business is the revenue per available seat hour (REVPASH) (Maia et al., 2023). Surprisingly, a major revenue management obstacle in the airliner industry has continued to be cabin configuration. The key challenge is the maximization of the total revenue in the airline industry per multifaceted cabins by sharing the seats of a higher service cabin with passengers who preferred the exotic classes that corresponds to a cabin that provides reasonable service standards. The major notion about this method is that passengers who reserved seat in the economy cabin will eagerly welcome an upgrade to a cabin that offers better service. (Yeoman, 2022). one of the recent innovations applicable to revenue management in the last twelve years was dominant in the restaurant business. The restaurant industry faces various capacity constraint problems and the unique characteristics of restaurants like flexibility in meal duration and the more flexible capacities have seen the improvement of revenue management led by professor Sherri Kimes from Cornell Hotel school (Yeoman, 2022).

METHODOLOGY

This paper adopts the use of search engines in accessing appropriate research sites such as Google scholar, and Sciendo to search for relevant literature on the subject matter. To achieve this the author searches for current literature especially 2020- 2024. Therefore, the paper is a desk review approach of strategic cost management and revenue management adopting a document and content analysis approach. Though, key words such as strategic cost management were first searched followed by revenue management. The author attempted to search recent research on strategic cost management and revenue management (RM) by means of a pre-existing data and other academic journals especially since most revenue management technologies were dominant in the hotel and restaurant industry considering their critical impacts and successes. A filter-criteria was also adopted. This method filters the works of literature unrelated to strategic cost management and revenue management.

The paper is constrained by not covering much on an empirical analysis of strategic cost management and revenue management. However, cadez and Guliding (2008) studies reveal that there is a positive association between strategic cost management application and performance. Their study suggests that firms that adopts more strategic cost management tools and other management control systems seem to improve operational performance relative to their competitors that use less of strategic cost management practices. However, the study did not include revenue management. However, key performance indicators (KPI) encompass revenue/earnings management which in turn may result in profitability performance. In the same vein, this paper has shown that revenue management is also employed as a management strategic system control aimed at enhancing organizational and industrial performance especially in airlines and other similar industries.

DISCUSSION OF FINDINGS

This paper reveals that strategic cost management closely related to management accounting strategic assist an organization to fashion out better strategies that aim to bring about a sustainable competitive improvement over other competitors. Also, the paper has shown that an organization utilizes data related to the costs of an enterprise identifying the best strategies that result in a sustainable and competitive advantage for each firm. This paper finding is similar to (Michael 2013; Nyaga, 2023) who conclude that more flexible capacities result to improvement of revenue management. On the contrary, the philosophy of revenue management success is its unique ability to make informed decisions and find remedies to organizational multifaceted problems, balancing fixed capacities and pricing strategy. On a final note, this paper reveals that the concept of revenue management was specifically popular among the airline industry, in the early days followed by other industries such as hotel, restaurant and casinos and entertainment industry. Organizations should adopt the use of value chain analysis such as porters five forces (1979) strategy rather than the traditional approach like value added.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The paper has examined the strategic cost management and revenue management systems adopted by organization, industry or service sectors. The key discussion of this paper is to determine the relationship existing between strategic cost management and revenue management. The systematic and content analysis of this paper reveals the following;

i. the conceptual review of both terminologies,
ii. their key definitions and application in real life situations

iii. Their major similarities, key distinctions, approaches/techniques as well as their criticism

The paper has also shed more light on how management strategies and strategic planning of cost cutting measures and management of revenue contribute positively to the competitive position and its use of value chain analysis, Porter's five forces and activity-based costing (ABC) theories in improving revenue management hence maximizing organizational profit. The paper concludes that the core focus of a strategic cost management is the managerial use of cost and revenue management role in competing in the global market and maintain sustainability in the long-run. The paper also concludes that an organization should not reduce costs indiscriminately because strategic cost management is not all about reducing costs alone but should likewise focus on productivity improvement, revenue management because reducing cost in one activity level could shift costs to another activity level. The paper also concludes that to maximize efficient revenue, organizations should endeavor to sell the right products, to the right customers, at the right duration and at the right place and appropriate prices. Therefore, revenue management model is an ideal strategy to achieve this.

Recommendations

Based on the findings and conclusion, this paper recommends the following:

i. All organizations that prioritize strategic cost management and revenue management focus oriented should adopt and implement these strategies considering that some organizations differ in strategies and in types.
ii. Top managers and other policymaking executives should not indiscriminately reduce organizational costs simply because of revenue management improvement attainment.
iii. Organizational policymakers or strategist should seek the advice and support of all key stakeholders before implementation of well-tailored managerial strategies.

Implications of the studies/suggestion for Further Research

This study has some implications in that several questions remain unanswered as this work does not cover an empirical analysis. The traditional cost management accounting has a lot of controversies such as narrow, too aggregated and too distorted to be relevant in decision - making purposes in comparison to refined strategy management accounting. Therefore, this study suggests further research to be conducted on this area with empirical evidence to establish a robust relationship between strategic cost management and revenue management strategies.

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EFFECTS OF ACCOUNTING RECORDS ON THE PERFORMANCE AND SUSTAINABLE DEVELOPMENT OF COMMERCIAL SCALE RICE FARMING IN TARABA STATE

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Abstract
*This paper investigates the effects of accounting records on the performance and sustainable development of commercial scale rice farming in Taraba State, Nigeria. The research design is survey method comprising of opinions, impressions and perceptions of the respondents. The sampling technique was simple random sampling which was used to collect data from 46 commercial scale rice farming in the state. The findings show that most of the commercial rice farms keep accounting record but majority of them do not have knowledge of accounting and standard record keeping. There chi-square test of the opinions of the respondents revealed that accounting records have significant effects on performance and sustainable development of commercial scale rice farming in the state. The study recommends private and public sectors partnership to assist commercial scale rice farmers on various issues relating their growth through good keeping of accounting records, support from institutions of higher learning and the training of accountants by these institutions on practical means of solving accountancy and reporting record needs of commercial scale rice farming enterprise in the stat*e.

Keywords: Accounting Records, Commercial Rice Farming, Taraba

INTRODUCTION

Accounting records is the maintenance of books of accounts of financial transactions of a business, for taking informed judgements and decisions. It is important for planning, decision making and control, without which a firm will find it difficult to thrive (Kabir, Zaharaddeen &Zaharaddeen, 2023). Mustapha and Abdullahi (2023) defined accounting record keeping as the art of keeping record of financial transactions of a business in a systematic and chronological order, such that the records kept will provide means by which an enterprise can be managed in an orderly manner. Record keeping is the process of identifying, classifying and keeping in a systematic and logically manner records of business transactions of an enterprise to facilitate the preparation of financial statement for the purpose of performance evaluation (Balagobei, 2019). Muchira (2012) explains that good accounting records positively influence managerial decisions. The most important information to an entrepreneur comes from the accounting information system. According to Sajuyigbe, Adeyemi, &Odebiyi (2016), an efficient and effective record keeping is important to any organization, as it affords a measurement and communication mechanism which can help in improving the quality of decisions and actions which affect the way the scarce resources of an organization is put into use.

According to Maseko and Manyani (2011), accounting systems provide information to management for performance evaluation and control purposes. Ademola, *et al.*, (2012) explain that record keeping provide the basis for liquidity assessment, financial evaluation, managerial planning, control and decision-making. Okoh and Uzoka (2012) explain that the roles of accounting information also include serving as the basis for credit extension by lenders and for computing taxes by relevant tax authorities. Muriithi (2017) explains that the use of accounting software to keep records of business financial transactions ease stock reconciliation, keep track of business assets and provide basis for comparability of financial performance. It also provides financial intelligence for a business, speeds of processing of transactions and enhances completeness and accuracy of accounting information. Good record keeping enables business firms to plan properly, and to curtail misappropriations of resources (Mwebesa, *et al.*, 2018).

Rice is an important crop that doubles as both food crop and cash crop in most economies of the world. It is a staple food for half of the world population and about, three quarter of a billion of the world's poorest people depend on the staple to survive (Akinyele, 2019). Also, rice production in Nigeria is commonly practised by the smallholder farmers in either upland or lowland agro-ecology. Some important features of the smallholder rice production in Nigeria include: smallness of area of land under cultivation, poor resource endowment (Ojo, 2020); lack/ limited access to credit, lack of access to input/output market (Okeke, Mbannasor and Nto, 2019). Rice cultivation has attracted the attention of more farmers in Nigeria making the country to be ranked the second largestproducer of rice in Africa as a result of a 70 percent increase in production in the past decade (United States Department of Agriculture – Foreign Agricultural Service, 2019). Yet demand-supply gap exist in the rice sub-sector of the Nigerian economy (Okpiaifo, Durand-Morat, West, Nalley, Nayga Jr. and Wailes, 2020) as a result of low productivity technology of rice production (Olasehinde, Qiao and Mao, 2019). In order to bridge the gap supply and demand of rice in Nigeria, a lot of government policies were development to stimulate commercial rice production.

The above highlighted incentives have resulted in private investors coming into the production of rice in Nigeria. Some of them include: Flour Mills of Nigeria, Bidda-Badeggi, Niger State; Ebony Rice, Ikwo, Ebonyi State; and Dominion Farms, Gassol, Taraba State (Okodua, 2017). In Taraba State, owing to the need to produce more rice, the Dominion Farm in Gassol LGA and many other commercial ventures has also embarked on a commercial rice production. These private and government participations are expected to encourage local content and value chain development. This will further improve foreign exchange position by reducing of the importation of finished food products such as rice, which is a significant component food imports. To enable the growth and development of commercial rice production in the state, adequate financial records and information is very relevant (Muriithi, 2017). This according to Kabir, Zaharaddeen&Zaharaddeen (2023), One of the first steps in being a successful farm manager is keeping well-maintained, accurate records and establishing a sound record-keeping system. Keeping accurate records has its benefits, like helping farmers plan and complete realistic forecasting for the next year. According to Agrihome Expressions, additional benefits of being particular about record keeping include: utilization by lenders, government agencies, insurance companies and others often require detailed and well-maintained records of the farm's income and expenditure before giving out loans to farmers and good farm record-keeping helps the farmer plan and do realistic forecasting (Mustapha and Abdullahi, 2023). Similarly, record-keeping provides valuable information on which methods work utilized and also the farmer can better predict price changes of inputs and produce from expenditures and sales records kept from previous years (Okpiaifo*et al.*, 2020). This study therefore seek to investigate the effects of accounting records on the performance and sustainable development of commercial scale rice farming in Taraba State, Nigeria, hence it assisted in answering the questions like; what is the effects of financial records on the performance and sustainable development of commercial scale rice farming in Taraba State.

Statement of Hypotheses

H_{01}: Accounting records does not have significant effect of the performance of commercial scale rice farming in Taraba State

H_{02}: Accounting records does not have significant effect of sustainable development of commercial scale rice farming in Taraba State

METHODOLOGY

Descriptive research survey design was used in the study. According to Burns and Grove (2003), descriptive design portrays an accurate profile of persons, events, or account of the characteristics, for example behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group. The descriptive design is preferred because it ensured complete description of strategies, making sure that there is minimum bias in the collection of data. The study's population was commercial scale rice farming enterprises in Taraba State. The study adopted nonprobability purposive sampling method to arrive at the participating commercial scale rice farms. Purposive sampling technique is used when the research design calls for a sample of population that exhibit particular attributes or characteristics (Mulandi, 2013). Some of the attributes of the commercial scale rice farm included farms which have been operation for at least three years and have the capacity to produce 10 tons of paddy or processed rice annually and have register with Cooperative Affairs Commission (CAC). The sample size for the study was selected from the list of commercial scale rice farmers in Taraba that registered with CAC. The study targeted a sample size of 46 (30%) of commercial scale rice farmers in the state. Sample size determination aims at selecting part of the population from which information will be drawn to form conclusions about the entire population. Mugenda and Mugenda (2003) explain that for any significant study, 10-30% of the selected population makes up an adequate sample size.

The study performed data collected through a questionnaire structured to meet the objectives of the study. According to Mugenda and Mugenda (2003), questionnaires are commonly used to obtain important information about a population under study. Each item is developed to address specific themes of the study. A five-point Likert scale was used. The researcher used pilot study to evaluate the effectiveness of the instrument used in measuring objects it intends to measure before using them in the main study. About 30 questionnaires were distributed to Bread producing SMEs within Jalingo Metropolis and 25 were returned but gave an internal consistency of 0.89 from Conbach Alpha reliability test. Data was computed and analyzed with the aid of a Special Package for Social Science (SPSS). Frequencies and the percentage were used for Bio-data variation. Mean and Standard deviations were used to answer research questions. Inferential statistics was used for the test of the hypotheses. Chi-square test was used to test the formulated hypotheses. The reason for adopting these statistical tools is to test whether there will exist some significant differences or not and either to retain or reject the null hypotheses. All the hypotheses were tested at a 0.05 level of significance like what is obtainable in other social sciences.

RESULTS AND DISCUSSION

All the data used in this analysis were extracted from the opinion of the respondents as depicted in their response to the statements in the questionnaire. From the forgoing, an analysis of our data is presented in a form highlighting the opinions of our respondents who are all commercial scale rice farmers in Taraba State.

Section A- Bio Data

The section A of the questionnaire deals with personal data and demographic distribution of the respondents. The data is presented in tabular form as follows:

Table 1: Demographic Variables of the Respondents

Sex	**Frequency**	**Percentage**
Male	5	10.90
Female	41	89.10
Total	46	
Age (years)	**Frequency**	**Percentage**
18-25	2	4.30
26-35	7	15.20
36-45	9	19.60
46-55	25	54.30
56-60	3	6.50
Total	46	100
Educational level	**Frequency**	**Percentage**
No formal education	6	13.00
Primary education	17	40.00
Secondary	12	26.10
Tertiary	11	23.90
Total	46	100
Marital status	**Frequency**	**Percentage**
Single	4	8.70
Married	32	69.60
Divorced	8	17.40
Widowed	2	4.30
Total	46	100
Experience (Years)	**Frequency**	**Percentage**
0-5	17	37.00
6-10	19	41.30
11-15	8	17.40
16-20	2	4.30
Total	46	100

Source: Research survey, 2024

Response to question 1 of section A of the questionnaire, out of 46 valid responses recovered, 41 respondents representing 89.1% are male while 5 respondents representing 10.9% are female. These indicated that the population of male commercial rice farmers are more in number than female farmers in Taraba State. Similarly, Table 1above, it can be deduced that majority of the respondents were above 25 years of age. A further breakdown shows that

54.3% of the respondents were between 46-55 years while 6.5% were between 56-60 years. Thus, the respondents on the average can be said to be mature enough to understand commercial scale rice production as well as maintained good accounting record.

From the Table 1 above, it can be seen that from a total of 46 respondents, commercial scale rice farmers with no formal education are 6 representing 13% of total sample; 17 or 40% are primary school holders, 11 or 26.1% are secondary school holders, while the remainder 11 respondents or 23.9% are tertiary education holders. This shows that most of the commercial scale rice farmers in Taraba state have between primary to tertiary education. This will help them to maintain important accounting records in the farm. Also, Table 1 above showed that married people constitute the bulk of the respondents included in this study. Married people represent 69.6% of the respondents used for this study, while those who are single represent 8.7%of the respondents used for this study. Those who claimed to be divorced represent 17.4% of the respondents, while widowed represent 4.3%. Therefore, this analysis shows that married people are more in commercial scale rice production in Taraba state.

From table 1 above, 17 respondents representing 37% were into commercial scale rice farming for between the period of five years or less, 19 respondents representing 41.3% were into rice farming business for 6-1o years, 8 respondents representing 17.4% have spent 11-15 years in the farming business, while 2 respondents representing 4.3% have spent up to 16-20 years in the commercial rice farming business. This can be deduce that majority of the respondents are into rice farming business from 10 years and below.

Section B: QUESTIONNAIRE

This section seeks to enquire from the respondents their opinions on the effects of accounting record on performance and sustainable development of commercial scale rice farming in Taraba State.

Table 2: Do you normally Record all Transactions in rice farming business?

Variable	Frequency	Percentage
Strongly agreed	31	67.40
Agreed	6	13.00
Undecided	2	4.30
Disagreed	6	13.00
Strongly disagreed	1	2.20
Total	46	100

Source: Research survey, 2024

Table 2 above showed that, 31 (67.2%) respondents strongly agreed, 6 respondents (13%) agreed, 2 (4.3%) were undecided, 6 (13%) respondents disagreed, while 1 (2.2%) respondents strongly disagreed that they do not normally record all transaction in rice farming business. This shows that majority (67.4%) of the respondents strongly agreed that they kept record of all records in commercial scale rice farming in Taraba State.

Table 3: Do you have any Educational Background in Accounting Record Keeping?

Variable	Frequency	Percentage
Strongly agreed	6	13.00
Agreed	8	17.40

Undecided	5	10.90
Disagreed	18	39.10
Strongly disagreed	9	19.60
Total	46	100

Source: Research survey, 2024

Table 3 showed that 6 respondents representing 13% strongly agreed, 8 respondents representing 17.4% of the sample agreed, 5 respondents representing 10.9% were undecided, 18 respondents representing 39.1% of the sample disagreed while another 9 respondents representing 19.6% of the sample strongly disagreed with the statement. Thus, a majority of the respondent disagreed with the statement. This shows that most of the commercial scale rice farmers in Taraba State do not have formal educational background in accounting records keeping.

Table 4: Do the Government play role on influencing the use of accounting records?

Variable	Frequency	Percentage
Strongly agreed	34	73.90
Agreed	8	17.40
Undecided	0	0.00
Disagreed	3	6.50
Strongly disagreed	1	2.20
Total	46	100

Source: Research survey, 2024

Table 4 above shows that, 34 (73.9%) respondents strongly agreed, 8 (17.4%) agreed, 3 (6.5%) respondents disagreed, while 1(2.2%) respondents strongly disagreed that Government play role on influencing the use of accounting records. This show that majority of the respondents strongly agreed that government play a significant role in the use of accounting records among commercial rice farmers in Taraba State.

Table 4: Does accounting records have effects on performance of commercial rice farming in Taraba State.

Variable	Frequency	Percentage
Strongly agreed	35	76.10
Agreed	9	19.60
Undecided	2	4.30
Disagreed	0	0.00
Strongly disagreed	0	0.00
Total	46	100

Source: Research survey, 2024

The table 4 above indicates that 35 respondents or 76.1% strongly agreed, 9 respondents or 19.6% agreed, while 2 respondents representing 4.3% were undecided. This show that majority of the respondents strongly agreed that accounting records have effects of the performance of commercial scale rice farming in Taraba State.

Table 5: Does accounting records have effects on sustainable development of commercial rice farming in Taraba State.?

Variable	Frequency	Percentage
Strongly agreed	37	80.40
Agreed	8	17.40
Undecided	1	2.20
Disagreed	0	0.00
Strongly disagreed	0	0.00
Total	46	100

Source: Research survey, 2024

The table 5 above indicates that 37 respondents or 80.4% strongly agreed, 8 respondents or 17.4% agreed, while 1 respondent representing 2.2% were undecided. This show that majority of the respondents strongly agreed that accounting records have effects of sustainable development of commercial scale rice farming in Taraba State.

Test of Hypotheses

This section presented the results and outcomes of the null hypothesis formulated and tested based on the objectives of the study were summarized and presented. The test was carried out using Chi-square test. This was based on 5% (0.005) level of confidence and a Statistical Package for Social Science (SPSS) was used to analyzed the data. Two (2) hypotheses were tested and the criteria for acceptance or rejection of the null hypotheses were determined by comparing the p-value against the pre-determined level of confidence (0.005). A hypothesis is rejected if the p-value is less than 0.005 and vice versa.

H_{01}: Accounting records does not have significant effect of the performance of commercial scale rice farming in Taraba State

Table 6: Summary of Chi-Square Analysis on accounting records and performance of commercial scale rice farming in Taraba State

	Value	Df	Asymptotic significance (2-sides)
Person Chi-Square	25.12	9	0.001
Likelihood ratio	17.45	9	0.007
Linear-by-Linear Association	3.124	1	0.062
N of Valid Cases	4		

*= Significant at $p \leq 0.05$

The result of the Chi-Square analysis in table 6 shows that the value of chi-square statistics is 25.12. The p-value which also appears in the same row in the asymptotic significance (2-sided) column was 0.001 and the likelihood ratio was also significant as well. Since the p-value (0.001) is less than the standard alpha value of 0.005, we reject the null hypothesis and concluded that accounting record have significant effect of performance of commercial scale rice farming in Taraba State.

H_{02}: Accounting records does not have significant effect of sustainable development of commercial scale rice farming in Taraba State

Table 7: Summary of Chi-Square Analysis on accounting records and sustainable development of commercial scale rice farming in Taraba State

	Value	Df	Asymptotic significance (2-sides)
Person Chi-Square	18.41	9	0.003
Likelihood ratio	13.59	9	0.007
Linear-by-Linear Association	2.981	1	0.059
N of Valid Cases	4		

*= Significant at $p \leq 0.05$

The result of the Chi-Square analysis in table 7 shows that the value of chi-square statistics is 18.41. The p-value which also appears in the same row in the asymptotic significance (2-sided) column was 0.003 and the likelihood ratio was also significant as well. Since the p-value (0.003) is less than the standard alpha value of 0.005, we reject the null hypothesis and concluded that account record has significant effect on sustainable development of commercial rice farming in Taraba State.

Discussion of Findings

Accounting records is imperative for the growth and development of a firm been small medium or large because it serves as a unit for measuring the performance of any profit inclined organization. It is important that the accounting systems for any businesses to fulfil such functions as providing essential financial information for the owners and managers in order for them to be able to manage the business in a competitive environment and to make informed decisions to prevent business failure and to expand the business (Abdulrasheed, Khadijat and Oyebola, 2012). This study was conducted to investigate the effects of accounting records on the performance and sustainable development of commercial rice farming in Taraba State. Two research questions and hypothesis were formulated and tested. Descriptive research survey design was used in the study to collect data from 46commercial rice farming enterprises with at least minimum of three years operation and dully registered with Corporate Affairs Commission (CAC) in the state.

Questionnaire was the major tool for data collection, each item in the questionnaire was developed to address specific themes of the study using five-point Likert scale. Data was computed and analyse with the aid of a Special Package for Social Science (SPSS) using both descriptive statistics and chi-square to test the formulated hypotheses. The major findings show that majority of commercial scale rice farmers were male and married. Most of them have at least secondary educational level and age range of above 30 years. Similarly, majority (67.4%) of the respondents strongly agreed that they kept record of all operations, most of the commercial scale rice farmers in Taraba State do not have formal educational background in accounting records keeping and majority of the respondents strongly agreed that government play a significant role in the use of accounting records among commercial rice farmers in Taraba State. Also, majority of the respondents strongly agreed that accounting records have effects of the performance and sustainable development of commercial scale rice farming in Taraba State.

The test of null hypothesis one (H_{01}) revealed that that accounting record have significant effect of performance of commercial scale rice farming in Taraba State, and thus the hypothesis was rejected. This agrees with the findings of Olasehinde*et al.* (2019) who stated that business benefit from availability of accounting information, equality important is the availability of accounting that facilitates the solution or resolution of business planning, organization and control function of the enterprises as a social organization for higher productivity. According to Onaolapo and Adegbite, (2014), accounting record allows organizations to evaluate their financial performance over time by comparing financial statements from different period, managers can assess whether the company is growing, holding steady or declining. The result of hull hypothesis two (H_{02}) revealed that accounting record has significant effect on sustainable development of commercial rice farming in Taraba State, and thus it was rejected. Muriithi (2017) stated that business sustainability, growth and management can only be realistic when adequate standard recording mechanism is put in place by the management of an organization.

CONCLUSION AND RECOMMENDATION

According to the findings presented and discussed, this study concluded that accounting records have significant effects on performance and sustainable development of commercial scale rice farming enterprise in Taraba State. Even though most of the respondents do not have formal educational knowledge on keeping accounting records and information, the records kept enhance commercial rice farming sustainable growth and development. The study therefore made the following recommendations; There should be Private and public sectors partnership to assist commercial scale rice farmers on various issues relating their growth through good keeping of accounting records through provision of seminars on entrepreneurship and trading activities.; institutions of higher learning such a universities, polytechnics and technical colleges should encourage collaborative studies to unravel the specialty of accounting records that will fit into commercial scale rice farming enterprises in the State. And the training of accountants by theseinstitutions and the various professional institutes should focus more on practical means of solving accountancy and reporting needs of Commercial scale rice farming enterprise in the state.

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MODERATING EFFECT OF NON-OIL REVENUE ON SECTORAL EXPENDITURE AND ECONOMIC PERFORMANCE IN NIGERIA

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Abstract

This study examines the impact of sectoral expenditure on economic performance in Nigeria, with a specific focus on the moderating role of non-oil revenue. Using a robust empirical framework and data spanning from 1994 to 2023, the study analyzes government expenditure across key sectors including agriculture, manufacturing, and services. Ex-post facto research design was adopted and Ordinary least square regression technique was used for the analysis. The findings revealed that while sectoral expenditure on agriculture shows varying degrees of significance in their effects on economic performance, expenditure on manufacturing and expenditure on services consistently demonstrates a positive and significant impact. Moreover, when moderated by non-oil revenue, these sectoral expenditures reveal enhanced economic performance outcomes. The study underscores the importance of diversified revenue sources in bolstering sectoral expenditures' effectiveness and recommends strategic policy measures to optimize sectoral allocations for sustained economic growth in Nigeria.

Keywords: Sectoral Expenditure, Economic Performance, Non-Oil Revenue,

INTRODUCTION

Nigeria, Africa's largest economy, has long been characterized by its heavy reliance on oil revenues. This dependence has resulted in significant vulnerabilities to oil price fluctuations, which have often led to economic instability. To mitigate these vulnerabilities and promote sustainable economic growth, there has been a growing emphasis on diversifying the country's revenue base, particularly through enhancing non-oil revenues (Omojolaibi & Ejemeyovwi, 2019). This study aims to explore the moderating effect of non-oil revenue on sectoral expenditure and economic performance in Nigeria.

Nigeria's economy has traditionally been driven by the oil sector, which accounts for a significant portion of government revenues and export earnings. However, the volatility of global oil prices has frequently exposed the economy to fiscal deficits, inflation, and slow growth. In response, the Nigerian government has been making efforts to diversify its revenue streams by developing non-oil sectors such as agriculture, manufacturing, and services (World Bank, 2020).

Non-oil revenue encompasses all government income derived from sources other than oil and gas. This includes taxes (corporate, personal income, value-added tax), customs duties, and revenues from state-owned enterprises outside the oil sector. Enhancing non-oil revenue has been a strategic priority for the Nigerian government, aimed at reducing the economic impact of oil price volatility and fostering more stable and sustainable growth (Central Bank of Nigeria, 2021).

Sectoral expenditure refers to government spending allocated to different sectors of the economy, such as education, healthcare, infrastructure, agriculture, and industry. The effectiveness of sectoral expenditure in driving economic performance is influenced by various factors, including the efficiency of public spending, the absorptive capacity of the sectors, and the overall economic environment (Omojolaibi & Ejemeyovwi, 2019). Economic performance in this context refers to key indicators such as GDP growth, employment rates, inflation, and poverty reduction. A well-diversified revenue base and effective sectoral expenditure are crucial for achieving robust and inclusive economic performance.

This study hypothesizes that non-oil revenue plays a moderating role in the relationship between sectoral expenditure and economic performance. The rationale is that a diversified revenue base provides a more stable and predictable source of funding for public expenditure, thereby enhancing the effectiveness of government spending in driving economic growth and development.

Nigeria's economy has historically been heavily reliant on oil revenues, which account for a significant portion of government income and foreign exchange earnings. This dependence has exposed the country to the volatility of global oil prices, leading to economic instability, fiscal deficits, and fluctuating growth rates. Despite efforts to diversify the economy, the non-oil sectors have not developed at a pace sufficient to cushion the economy against the adverse effects of oil price shocks.

Recent studies have provided valuable insights into the relationship between government revenue, sectoral expenditure, and economic performance in Nigeria. However, significant gaps remain, which this study aims to address. For instance, while Ebi and Ayodele (2017) examine the impact of fiscal policy on economic growth, they often do not consider the moderating role of non-oil revenue on sectoral expenditure and economic performance. Similarly, Ude and Agodi (2014) investigate the relationship between non-oil revenue and economic growth but do not provide detailed sector-specific insights on how non-oil revenue influences the performance of key sectors such as agriculture, manufacturing, and services. Furthermore, Victor et al. (2023) explore the moderating effects of oil revenue and non-oil revenue on government expenditure and economic growth in Nigeria, but their study uses aggregate government expenditure, whereas this study evaluates the relationship through sectoral expenditure. Addressing this gap, the study examines the moderating effect of non-oil revenue on agriculture expenditure, manufacturing expenditure, and services expenditure on economic performance in Nigeria.

The upcoming section will clarify concepts related to sectoral expenditure, economic performance, and non-oil revenue. It will detail the methods employed, present findings and discussions, and offer policy recommendations.

LITERATURE REVIEW

Government Expenditure

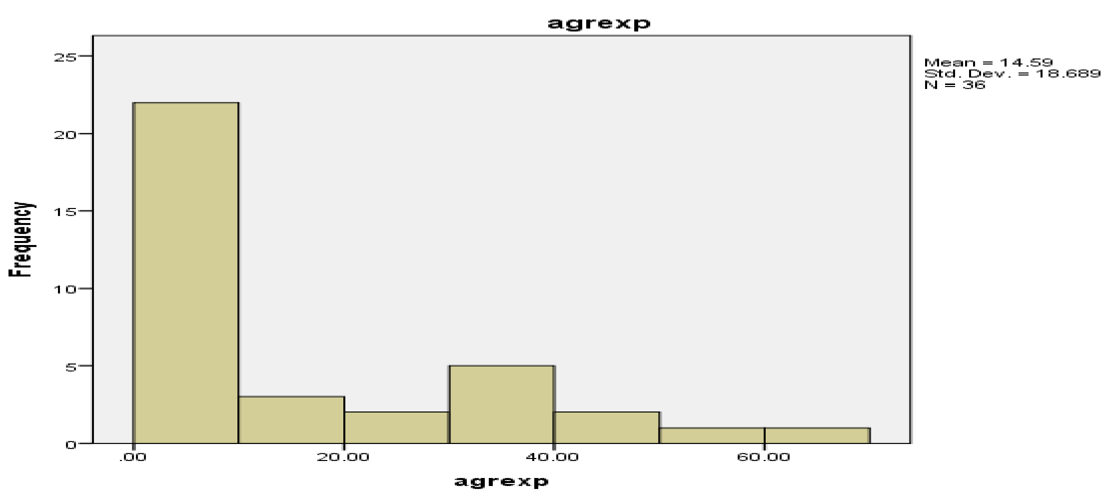
Government expenditure is an input which requires maximum efficiency in allocation so as to accelerate economic growth (Therkildsen, 2010). According to Jhingan (2007) government expenditure policy involves decisions which influence the flow of funds from government into private economy with the view of achieving economic stability, employment generation and economic growth.

According to Barro and Grilli (1994), Government expenditure includes all government consumption and investment but excludes transfer payments made by a state. Government expenditure can be for the acquisition of goods and services for current use to directly satisfy individual or collective needs of the members of the community or it can be for acquisition of goods and services intended to create future benefits such as infrastructure investment and the expenditures can represent transfers of money, such as social salaries and cost of administration.

There are sectors that are seen as being critical and productive like Agricultural, manufacturing, services, Education, Transport and Communication, defence that have the potentials of contributing to the performance of the economy (Adesoye, et al., 2010). Therefore, the public expenditure that is directed towards increasing the agricultural productivity to meet growing demand for foreign exchange, foods, raw materials, increasing supply of consumer goods and encourage expansion of small industry which will stimulate economic growth in Nigeria. In addition, government expenditures on social services such as education is one of the core strategies of human capital development that is necessary to promote and achieve sustainable economic development.

According to Anyawu, et al. (2012), expenditure on defence contributes to security of lives and property, growth and development. The government expenditure on the defence, maintenance of law and orders which promote serenity, sanity and the conducive atmosphere for viable investment which will stimulate the local investment, foreign direct investment and greenfield investment that ultimately promote sustainable growth and development of the nation. More to that, government expenditure on transportation and communication cannot be relegated because of the critical role it contributes to the industrialization and commercial activities of any economy.

Figure 1: Sectoral Expenditure by Government in Nigeria from 1981-todate



Source: Researcher Computation through E-View

The contribution of agricultural sector to the economy cannot be overemphasized when considering its building roles for sustainable development, in terms of employment potentials, export and financial impacts on the economy. Agriculture is an important sector of Nigerian economy. In the world today, agricultural sector acts as the catalyst that accelerates the pace of structural transformation and diversification of the economy, enabling the country to fully utilize its factor endowment, depending less on foreign supply of agricultural product or raw materials for its economic growth, development and sustainability. Apart from laying solid foundation for the economy, it also serves as import substituting sector, providing ready market for raw materials and intermediate goods. The agricultural sector contributes significantly to the nation's economic development by: increasing government revenue through tax; improving the standard of living; infrastructural growth; contribution to Gross National Products (GNP); employment generation; enhance manpower development; It plays a key role by sourcing of food for man and animal and providing raw materials for the industrial sector, provision of employment and foreign exchange to the government, amongst others. So far, it has been argued that the faster trend through which a nation can achieve sustainable economic growth and development is neither by the level of its endowed material resources, nor that of its vast human resources, but technological innovation, enterprise development (commercial farming of various types inclusive) and industrial capacity.

Inadequate funding of the agricultural sector has been reechoed by several experts as an obstacle to increased agricultural output (CBN, 2007; Bernard, 2009). However, from a nominal point of view, it is evident that in Nigeria, government spending on agriculture continue to increase over the years while empirical evidence has revealed that the performance of the agricultural sector has been inadequate (CBN, 2000; Ekerete, 2000). The agricultural sector in Nigeria which was the main stay of the economy is no longer performing the lead role it was known for. By mid- 1970s Nigeria's agriculture started to experience problems, agricultural exports began to decline and food shortages started emerging. From 1975, emboldened by considerable increased revenue from petroleum, government assumed heavier responsibilities for agricultural production, input supply and marketing; in addition to adopting credit control and other allocative policies in favour of agriculture (Ojo & Akanji, 1996). Agricultural production stagnated at less than 1 percent annual growth rate between 1970 and 1982. There was a sharp decline in export crop production, while food production increased only marginally. Thus, domestic food supply had to be augmented with large imports. Food import bill rose from a mere N113.88 million annually in 1970-1974 to N1,964 million in 1991 (CBN,2003). Also, in 1994, the agricultural sector performed below the projected 7.2% of budgetary output (Lawal, 1997). Further contribution of agricultural sector to economic growth has been decreasing continuously after the Structural Adjustment Programme (SAP) period. Presently, in Nigeria, there has been a conflicting view about spending on agriculture; the performance of the agricultural sector had fared better than it was before independence.

The agricultural sector has witnessed remarkable policy changes since the Nigerian Vision 20: 2020 (NV20: 2020) was launched in 2009. The first implementation plan (2010-2013) was ongoing when the agricultural transformation agenda (ATA) came on stream in 2011 and lasted till 2015. In August 2016, the agriculture promotion policy (otherwise known as the Green Alternative) was launched and it is now reshaping the direction of agricultural development in the country. A further motivation for a joint review of the agricultural sector is the regional and sub-regional initiatives aimed at fostering peer review and knowledge sharing in the transformation of agriculture in Africa to among other things achieve food security and global competitiveness as required under the ECOWAS Agriculture Policy (ECOWAP), the Comprehensive Africa Agriculture Development Program (CAADP) process and Malabo declaration.

In 2014, Nigeria's president and other African Heads of State and Government assented to the Malabo declaration on accelerated agricultural growth and transformation for shared prosperity and improved livelihoods. The implementation of the declaration is to be monitored every two years with the first review meeting scheduled to take place in January 2018. The carrying out of Joint Sector Reviews (JSRs) is being encouraged by the African Union as a means of strengthening the agricultural policy process under the CAADP. The JSR is a process by which progress in implementing jointly agreed sectoral goals and targets is reviewed in an inclusive and evidence based manner. In broad terms, a JSR seeks to assess the performance and results of the agricultural sector, assist the government in setting sector policy and priorities and assess how well state and non-state actors have implemented pledges and commitments. It is also viewed as a useful management and support tool for inclusive planning, programming, budgeting, monitoring and evaluation and overall development of the agricultural sector (Bahiigwa, et al., 2013). In this way, it contributes to the national planning process and to the achievement of national goals and development targets. Nigeria's JSR is being implemented in the context of the Economic Recovery and Growth Plan (ERGP) and the Agriculture Promotion policy (APP). The JSR also recognizes Nigeria's implementation of the CAADP and the ECOWAP. It recognizes that country processes are to be aided by regional initiatives which Nigeria is part of and which are to be adapted to Nigerian peculiarities.

Furthermore, the JSR entails participatory activities in which stakeholders come together to examine progress in the agricultural sector and chart a way forward. This report was prepared as a background report to provide objective evidence for the participatory review of the performance of the sector during the JSR workshop. The study seeks to (i) provide an overview of agricultural policies, programmes, institutions and implementation processes right from 2009 to date; (ii) examine trends in financial and non-financial production factors and inputs required for agriculture growth; (iii) review the performance of the agricultural production and trade using mutually agreed indicators under the Malabo declaration and (iv) undertake a review of progress in development results with a focus on poverty and food and nutrition security using standard indicators under the Malabo declaration. Essentially it is expected to guide key agricultural sector decisions including budgetary allocations, the national agriculture investment plan (NAIP) for 2018 to 2020 and the achievement of the objectives of the ERGP and the APP. It will also evaluate progress in meeting targets set under Vision 20: 2020. Thus, it is expected to add value to Nigeria's agriculture policy process towards the achievement of the goals and targets in the ERGP and the APP.

Federal expenditure on agriculture decreased from 106 billion Naira in 2010 to 77 billion Naira in 2016. At the same time total federal expenditure increased from 4.2 trillion in 2010 to 5.2 trillion in 2016 implying a reduction in the share of agriculture in total federal expenditure. Table 7 below indicates public agriculture funding in Nigeria. Agriculture's share reduced from three percent in 2010 to one percent in 2016. At the state level, agriculture expenditure decreased from 133 billion in 2010 to 92 billion in 2015 although it averaged 151 billion in the 2011 to 2013 period. However, the negative trend is clear as the 2014 to 2016 average of 124 billion is lower than the 2010 level. These trends at the federal and state level are challenging as the impact of inflation has not yet been factored in. When this is done, agriculture expenditure would have reduced in both real and nominal terms.

It is interesting to note that state governments account for more than half of combined Federal and state agriculture expenditure. In the 2011 to 2013 period they accounted for about 60 percent but this decreased to about 57 percent in the 2014 – 2016 period. At the state level, the share of agriculture in total expenditure decreased from 4.1 percent in 2010 to 2.9 percent in 2016. Although, its share tends to be higher than that at the federal level, the decrease in it remains challenging. The share of agriculture in combined Federal and state expenditure equally decreased from 3.2 percent in 2010 to two percent in 2016. This means that Nigeria is performing poorer in terms of meeting the Maputo declaration of committing 10 percent budgetary resources to agriculture. Much more effort is needed in this area. Hence, this study will ascertain the effect of government expenditure on agricultural sector to Nigeria economy.

Empirical Review

Victor et al. (2023) examines the relationship between government expenditure and economic growth and assesses the moderating effects of oil revenue and non-oil revenue in Nigeria from 1981 to 2021. The study uncovered short-term asymmetry in the government expenditure-economic growth nexus while the long-term relationship was symmetric. The study found that government expenditure is a significant determinant of economic growth in Nigeria and that oil and non-oil revenue influences the nexus between government expenditure and economic growth in Nigeria positively.

Olaoye et al. (2020) assessed the effects of government expenditure on economic growth in ECOWAS. Utilizing the System Generalised Method of Moments on 15 ECOWAS countries from 2005 to 2017, the study found that positive changes in government expenditure exert positive changes in economic growth, while negative changes in government expenditure exert negative changes on economic growth in Nigeria. This also explains the positive relationship between government expenditure and economic growth in ECOWAS.

Some previous studies have also disaggregated the effects of government expenditure on economic growth in Nigeria into government recurrent expenditure and government capital expenditure. For example, Ogar et al. (2019) employed the VAR approach and found that government recurrent expenditure has a nonsignificant positive influence on economic growth in Nigeria. Similarly, Obasikene (2017) found an insignificant positive influence of government recurrent expenditure on economic growth in Nigeria. Aluthge et al. (2021), using the autoregressive distributed lag (ARDL) approach on annual data from 1970 to 2019, found no influence of recurrent expenditure on economic growth in Nigeria.

Samuel and Oruta (2021) decomposed government expenditure into several components, such as recurrent expenditures on health, agriculture, education, debt servicing, and capital expenditure on social and economic services. While utilising data on Nigeria from 1981 to 2020, the study found that recurrent expenditures on health, agriculture, and education have a negative but weak influence on economic growth, while government recurrent expenditure on debt servicing and road construction exert a positive influence on economic growth in Nigeria. The study also revealed positive growth effects but a weak influence of capital expenditure on economic services and social services in Nigeria.

Duruibe et al. (2020) used a vector error correction model approach using data from 1986 to 2016 to disaggregate government spending using a similar method. The study also revealed that government expenditures on administration, economic services, and social and community services exert a strong positive influence on economic growth, unlike government transfers, which have a negative influence on growth.

Fiscal Policy Theory

Keynesian economics, developed by John Maynard Keynes during the 1930s, emphasizes the role of government intervention through fiscal policy to manage aggregate demand and stabilize the economy. Keynesian theory argues for increased government spending during economic downturns to stimulate growth and reduce unemployment. Fiscal policy theory provides a framework for understanding how government decisions regarding taxation, spending, and borrowing impact economic activity, sectoral expenditure, and economic performance. In the context of the study on the moderating effect of non-oil revenue on sectoral expenditure and economic performance in Nigeria, exploring fiscal policy theory helps illuminate the mechanisms through which government actions influence these variables.

Governments levy taxes on individuals, businesses, and goods/services to generate revenue. Taxes include corporate income tax, personal income tax, value-added tax (VAT), and customs duties. The composition of tax policies affects the amount and stability of government revenue. In Nigeria, non-oil revenue sources are increasingly important for diversifying revenue streams away from volatile oil revenues. These include taxes, fees, levies, and other income sources not directly tied to oil extraction or sales. Fiscal policy determines how government spending is allocated across different sectors such as agriculture, industry, and services. Sectoral expenditure aims to support economic growth, infrastructure development, social services, and other priorities outlined in national development plans.

The allocation of funds reflects government priorities and objectives for economic development. Effective fiscal policy ensures that sectoral expenditure is aligned with long-term growth strategies, promoting productivity and competitiveness in key sectors. Government spending can stimulate aggregate demand, particularly during economic downturns or recessions. Increased sectoral expenditure in infrastructure or social programs can boost economic activity, create jobs, and support overall economic recovery. Fiscal policy actions, such as increased spending or tax cuts, can have a multiplier effect on economic output. This effect amplifies the initial impact of government intervention on GDP growth and employment.

Fiscal policy decisions influence budget deficits and public debt levels. High deficits, financed by borrowing, can lead to higher interest rates and crowding out of private investment. Sustainable fiscal policies aim to balance revenue generation with expenditure commitments to maintain fiscal stability. Non-oil revenue diversification reduces dependency on volatile oil revenues, enhancing fiscal stability and resilience. It provides a more predictable revenue base for funding sectoral expenditure and economic development initiatives. Policies promoting non-oil revenue sources support economic diversification, job creation, and inclusive growth across sectors such as agriculture, manufacturing, and services.

Non-oil revenue moderates the impact of sectoral expenditure by providing alternative funding sources. It allows governments to sustain investments in critical sectors during economic fluctuations, improving sectoral performance and economic resilience. Effective fiscal policy management ensures that non-oil revenues are efficiently utilized to maximize the impact of sectoral expenditure on economic performance, fostering sustainable growth and development.

METHODOLOGY

The study utilizes an Ex post facto research design to achieve its objectives. The population includes government expenditure data on several public sectors in Nigeria from 1994 to 2023, namely Agriculture, manufacturing and services. All these sectors constitute the sample of the study to ensure comprehensive presentation and analysis. For the analysis, Ordinary Least Squares (OLS) regression is employed, and a Panel Stationarity test is conducted to assess the data's stationarity using the Augmented Dickey-Fuller unit test. The decision rule is based on critical values at the 1%, 5%, and 10% significance levels, where values greater than the test statistic indicate stationarity. Multicollinearity is tested using the Variance Inflation Factor (VIF), where a centered VIF above 10 indicates high multicollinearity, and below 10 indicates low multicollinearity. The linear model specification is thus:

$$D(EP)_t = \beta o + D(\beta_1 SEA,2)_t + D(\beta_2 SEM,2)_t + D(\beta_3 SES)_t + D(\beta_4 NOR,2)_t + D(\beta_5 NOR*SEA,2)_t + D(\beta_6 NOR*SEM)_t + D(\beta_7 NOR*SES)_t + e_{it}$$

Where:
EP_t= Economic performance
SEA=Sectoral expenditure on Agriculture
SEM = Sectoral expenditure on Manufacturing
SES = Sectoral expenditure on services
NOR = Non-oil Revenue
NOR *SEA = Moderated Sectoral expenditure on agriculture
NOR *SEM = Moderated Sectoral expenditure on Manufacturing
NOR*SES = Moderated Sectoral expenditure on Services
$\beta_1 – \beta_5$ = Coefficient of explanatory variables
βo = Constant or Intercept
e = Error Term
T = time
D= differencing

Table 1: Variable Measurement

Variable	Type of variable	Measurement
Economic performance (EP)	Dependent	Aggregate sectoral gross domestic product (GDP) from agriculture, manufacturing and services
Sectoral expenditure on agriculture (SEA)	Independent	Total amount of government expenditure on agriculture
Sectoral expenditure on manufacturing (SEM)	Independent	Total amount of government expenditure on manufacturing
Sectoral expenditure	Independent	Total amount of government expenditure on services

on services (SES)		
Non-oil revenue (NOR)	Independent (moderator)	Amount collected on value added tax

RESULTS AND DISCUSSION

Descriptive Analysis

Table 2: Descriptive Statistics

	EP	SEA	SEM	SES	NOR
Mean	3.210827	14.78921	9754.305	86797.43	426.2261
Median	2.719784	15.00000	4566.420	2913.800	289.3350
Maximum	9.383714	28.00000	45416.67	849972.6	1682.099
Minimum	0.644016	6.000000	24.60060	129.5210	4.100100
Probability	0.009818	0.097708	0.016873	0.000000	0.076323
Observations	30	30	30	30	30

Source: Generated from Eview, 2024

The study found that economic performance has shown an upward trend over the years, as indicated by government expenditure. The sectoral gross domestic product saw a maximum increase of 9.383714 billion, with a minimum economic performance of 0.644016 billion. The average economic performance stands at 3.210827 billion, with a deviation from the mean of 1.905062 billion and a median of 2.719784 billion. On average, economic performance has increased by 3.210827 billion units.

Furthermore, the results indicate that the average government expenditure on agriculture is 14.78921 billion. This mean value indicates that, on average, the Nigerian government has allocated 14.78921 billion to the agriculture sector. The maximum expenditure recorded in the past 30 years was 28 billion, while the minimum expenditure was 6 billion.

The average sectoral expenditure on manufacturing is 9754.305 billion, with a median of 4566.420 billion. This mean value indicates that, on average, the Nigerian government has allocated 9754.305 billion to finance manufacturing sector activities. The maximum expenditure recorded is 45416.67 billion, while the minimum is 24.60060 billion. These figures demonstrate a noticeable increase in total expenditure on manufacturing, as revealed in the findings.

The average sectoral expenditure on services is 86797.43 billion, with a median of 2913.800 billion. This mean value indicates that, on average, the Nigerian government has allocated 86797.43 billion to finance activities in the services sector. The maximum expenditure recorded is 45416.67 billion, while the minimum is 129.5210 billion. These figures highlight a significant increase in total expenditure on services, as indicated by the findings.The moderator variable, non-oil revenue, reflects government collections impacting sectoral performance, ranging from a maximum of 1682.099 billion to a minimum of 4.100100 billion. On average, non-oil revenue collections amount to 426.2261 billion.

Correlation Analysis

Table 3: Correlation Matrix

	EP	SEA	SEM	SES	NOR	NORSEA	NORSEM	NORSES
EP	1.000000							
SEA	-0.478914	1.000000						
SEM	-0.573542	0.396539	1.000000					
SES	0.128388	-0.389835	-0.328163	1.000000				
NOR	-0.491786	0.198910	0.291210	0.619302	1.000000			
NORSEA	-0.433912	0.271762	0.312687	-0.073304	-0.502242	1.000000		
NORSEM	-0.520835	0.307373	0.338115	-0.184699	0.877423	-0.497541	1.000000	
NORSES	-0.560553	0.523247	0.487116	0.499250	0.423255	-0.391786	0.446821	1.000000

Source: Generated from Eview, 2024

The findings reveal diverse relationships between sectoral expenditure and economic performance, with the variables generally showing a negative correlation with sectoral performance, except for sectoral expenditure on services, which displays a positive relationship with economic performance.

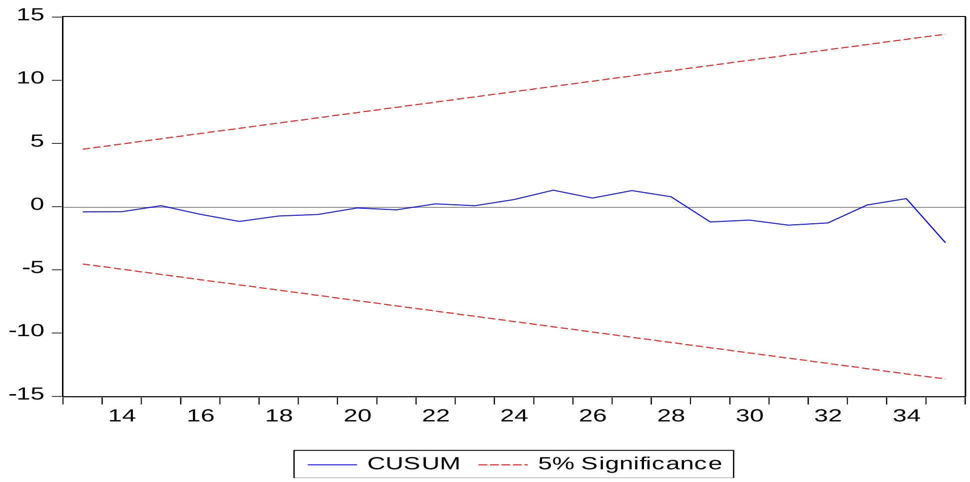
Table 4: Asymptotically Correlations Result

<table>
<tr><th>EP,NOR(-i)</th><th>EP,NOR(+i)</th><th>i</th><th>Lag</th><th>lead</th></tr>
<tr><td>*****| . |</td><td>*****| . |</td><td>0</td><td>-0.5180</td><td>-0.5180</td></tr>
<tr><td>*****| . |</td><td>******| . |</td><td>1</td><td>-0.5213</td><td>-0.5438</td></tr>
<tr><td>*****| . |</td><td>******| . |</td><td>2</td><td>-0.5205</td><td>-0.5448</td></tr>
<tr><td>******| . |</td><td>*****| . |</td><td>3</td><td>-0.5819</td><td>-0.4666</td></tr>
<tr><td>******| . |</td><td>****| . |</td><td>4</td><td>-0.6030</td><td>-0.4088</td></tr>
<tr><td>******| . |</td><td>***| . |</td><td>5</td><td>-0.6240</td><td>-0.3003</td></tr>
<tr><td>******| . |</td><td>.**| . |</td><td>6</td><td>-0.5832</td><td>-0.1937</td></tr>
<tr><td>*****| . |</td><td>. *| . |</td><td>7</td><td>-0.5385</td><td>-0.0630</td></tr>
<tr><td>*****| . |</td><td>. | . |</td><td>8</td><td>-0.5051</td><td>-0.0041</td></tr>
<tr><td>*****| . |</td><td>. |* . |</td><td>9</td><td>-0.4460</td><td>0.0715</td></tr>
<tr><td>****| . |</td><td>. |* . |</td><td>10</td><td>-0.3521</td><td>0.0888</td></tr>
<tr><td>***| . |</td><td>. |**. |</td><td>11</td><td>-0.2674</td><td>0.1617</td></tr>
<tr><td>.**| . |</td><td>. |**. |</td><td>12</td><td>-0.2185</td><td>0.2135</td></tr>
<tr><td>.**| . |</td><td>. |*** |</td><td>13</td><td>-0.1730</td><td>0.2663</td></tr>
<tr><td>. *| . |</td><td>. |*** |</td><td>14</td><td>-0.1220</td><td>0.2668</td></tr>
<tr><td>. *| . |</td><td>. |**** |</td><td>15</td><td>-0.0777</td><td>0.3712</td></tr>
<tr><td>. | . |</td><td>. |***** |</td><td>16</td><td>-0.0213</td><td>0.4569</td></tr>
</table>

Despite these varied correlations, the results indicate a moderate overall correlation, suggesting that the outcomes do not significantly impact the overall findings.The term asymptotic suggests that these correlations are calculated under the assumption that the sample size is sufficiently large, approaching an infinite or very large size, where statistical estimates converge to true population parameters. In simpler terms, it implies that the correlations reported in Table 3 are based on statistical methods that are valid for large sample sizes, providing insights into how variables relate to each other in the study context.

The result above determines the time lag between government expenditure and sectoral performance. Government expenditure is considered to be the leading indicator of sectoral performance, since the highest correlation occurs at the first lead where the lead is equal to the time lag of 0.5180. In other words, government expenditure has the most explanatory power when the regress sectoral performance is carried out on the first lag of government expenditure.

Figure 1: **Cusum Stability Test**



Source: E-View Output, 2024

The Cusum stability test indicates that sectoral expenditure is stable because the best line of fit is stable within the two bisecting lines in the result above.

Table 5: Stationarity Unit Root Test

		EP 1ST diff.	**SEA 1ST diff.**	**SEM 2nd diff.**	**SES 1ST diff.**	**NOR 2ND diff.**	**NORSEA 2nd diff.**	**NORSE M1ST diff.**	**NORSES 1ST diff.**
Augmented dickey fuller	t-statistic	- 8.894875	- 5.702016	-7.292905	- 5.850050	-5.389464	-7.201183	-6.083356	-5.455369
	Prob.	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001
Test critical values:	1% Level	- 3.632900	- 3.626784	-3.689194	- 3.626784	-3.699871	-3.689194	-3.626784	-3.639407
	5% Level	- 2.948404	- 2.945842	-2.971853	- 2.945842	-2.976263	-2.971853	-2.945842	-2.951125
	10% Level	- 2.612874	- 2.611531	-2.625121	- 2.611531	-2.627420	-2.625121	-2.611531	-2.614300

Source: Generated from Eview, 2024

The table above summarizes the stationarity test results of the data using the Augmented Dickey-Fuller (ADF) unit root test. EP, SEA, SES, NORSEM, and NORSES are all stationary at the first difference, while SEM, NOR, and NORSEA are stationary at the second difference.

Regression Analysis

Table 6: Regression Result

Variables	Coefficient	t- statistics	P-Value
D(SEA,2)	-2.710527	-2.016856	0.0527
D(SEM,2)	0.021382	7.530757	0.0000
D(SES)	0.338255	5.592625	0.0000
D(NOR,2)	0.011190	4.002391	0.0004
D(NOR*SEA,2)	1.012766	1.957018	0.0597
D(NOR*SEM)	0.000711	5.430567	0.0000
D(NOR*SES)	0.000186	2.811379	0.0088
C	-0.029503	-0.142721	0.8875
R^2	0.762327		
F-statistics	19.24479		
F-significance	0.000000		

Source: Generated from Eview, 2024

The model explains 76% variation on economic performance while the remaining is explained by other exogenous variables not included in the model and the f-statistics shows that the model is fit. Sectoral expenditure on agriculture (SEA) has a negative but insignificant effect on economic performance at the 5% level of significance. However, when sectoral expenditure on agriculture (SEA) is moderated by non-oil revenue, it shows a positive but still insignificant effect on economic performance. The negative but insignificant effect of sectoral expenditure on agriculture (SEA) suggests that simply increasing government spending in agriculture does not directly lead to significant improvements in economic performance. This could imply inefficiencies in how the funds are being utilized, possibly due to misallocation, corruption, or other structural issues within the agricultural sector. The positive but insignificant effect of moderated sectoral expenditure on agriculture (SEA) indicates that incorporating non-oil revenue into agricultural expenditure can potentially improve its impact on economic performance, even though the effect is not statistically significant. This points to the potential benefits of diversifying revenue sources and reducing reliance on oil revenue for funding sectoral activities.

Sectoral expenditure on manufacturing (SEM) has a positive and significant effect on economic performance at the 5% level of significance. This indicates that an increase in manufacturing expenditure leads to an increase in economic performance. Similarly, when manufacturing expenditure is moderated by non-oil revenue, it also shows a positive and significant effect on economic performance. The positive and significant effect of sectoral expenditure on manufacturing on economic performance confirms that investments in the manufacturing sector are beneficial for the economy. This suggests that government spending in this area is effective in driving economic growth. Given the positive impact, there is a strong case for increasing or maintaining high levels of expenditure in the manufacturing sector. This could encourage further private sector investments, leveraging government spending to stimulate broader economic activity.

Sectoral expenditure on services (SES) has a positive and significant effect on economic performance in Nigeria. This indicates that increasing expenditure in the service sector leads to an improvement in economic performance. Similarly, when the increase in service sector expenditure is moderated by non-oil revenue, it also shows a positive and significant effect on economic performance. Given the significant positive impact, there is a strong rationale for increasing or maintaining high levels of expenditure in the service sector. This can lead to enhanced economic performance and provide a multiplier effect across various aspects of the economy. The significant effect of moderated service sector expenditure by non-oil revenue highlights the importance of diversifying revenue sources. It demonstrates that non-oil revenues can effectively support critical sectoral investments, providing a more stable and sustainable financial base for economic activities.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study investigates the effects of sectoral expenditure on economic performance in Nigeria, with a particular focus on the moderating role of non-oil revenue. The findings indicate that sectoral expenditure on agriculture (SEA) has a negative but insignificant impact on economic performance, suggesting inefficiencies in the use of agricultural funds. Conversely, when moderated by non-oil revenue, sectoral expenditure on agriculture shows a positive, albeit still insignificant, effect. These results highlight the potential benefits of diversifying revenue sources and improving the management and allocation of sectoral expenditures.

The study reveals that sectoral expenditure on manufacturing (SEM) has a positive and significant effect on economic performance at the 5% significance level. This indicates that increased government spending in the manufacturing sector leads to improved economic performance. Moreover, when manufacturing expenditure is moderated by non-oil revenue, the positive and significant effect persists. These findings underscore the effectiveness of manufacturing investments in driving economic growth and highlight the importance of diversified revenue sources in sustaining sectoral expenditures.

The study reveals that sectoral expenditure on services (SES) has a positive and significant effect on economic performance. This finding underscores the importance of investments in the service sector as a driver of economic growth in Nigeria. Moreover, when service sector expenditure is moderated by non-oil revenue, it also demonstrates a positive and significant impact on economic performance. These results highlight the effectiveness of both sectoral investments and revenue diversification in fostering economic development.

Recommendations
Based on the findings and conclusion of the study, the study recommend as follows:

(i) Government should reassess how agricultural funds are allocated and ensure they are targeted towards high-impact areas such as infrastructure, research and development, and farmer support programs. They should also implement robust monitoring and evaluation mechanisms to track the utilization of agricultural funds, reduce corruption, and ensure accountability. Also, government should continue to put efforts on diversify the revenue base by enhancing tax collection, expanding the tax base, and developing other non-oil revenue sources. This will reduce reliance on oil revenues and provide a more stable financial foundation for sectoral investments.

(ii) Invest in critical infrastructure such as transportation, energy, and technology to support the growth and efficiency of the manufacturing sector. Also, encourage the adoption of advanced manufacturing technologies and innovation to increase productivity and competitiveness.

(iii) Negotiate and implement trade agreements that enhance market access for Nigerian service providers globally. This includes agreements on services trade, intellectual property protection, and investment facilitation.

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CASH FLOW AND SHARE PRICE OF LISTED OIL AND GAS FIRMS IN NIGERIA

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Abstract
This study investigated how cash flow affects the share prices of oil and gas companies listed in Nigeria. Secondary data from 10 such firms were analysed, drawn from their annual reports spanning 2011 to 2023. Using the Generalised Method of Moments, the study revealed several findings. Firstly, cash from operating activities displayed a negative and insignificant impact on share prices. Conversely, cash from investment activities showed a positive and significant influence on share prices. Cash resulting from financing activities, however, exhibited a negative and insignificant relationship with share prices. Additionally, net cash flow shows a positive yet insignificant influence on share prices. This suggests that Nigerian oil and gas firms should prioritize investment activities that yield robust cash flows and effectively communicate their growth strategies to investors. Moreover, investors are advised to consider various factors beyond just cash flow when making investment decisions in this sector. Regulatory bodies might also contemplate initiatives aimed at improving transparency and boosting investor confidence within the Nigerian oil and gas market.

Keywords: Cash Flow, Share Price, Oil and Gas

INTRODUCTION

Statement of cash flow according to IAS 1 constitute one of the contents of general-purpose financial statement. It evaluates how a company's management utilizes cash and cash equivalents. Cash flow statement provide information that are considered useful for the projection of impending cash flow also its uncertainties as well as the value of firms. (Akbar et al., 2011) as cited in (Ni et al., 2018). Cash flow statement is regarded as crucial information influencing the analysis of an entity's financial stability (Astrakhantseva et al., 2016). This significance stems from its ability, as highlighted by Kurbanova et al. (2018), to enable managers and stakeholders to promptly assess alterations in the company's net assets and its financial framework, encompassing liquidity and solvency.

Essentially, IAS 1 outlines that the cash flow statement ought to be ordered into three (3) primary categories: cash flows derived from operational activities, investment activities, and financing activities. Consequently, Barth et al. (2001) argue that the fundamental purpose of preparing financial statements is to meet the information needs of users and to serve as a tool for evaluating a company's future viability. Similarly, reflecting contemporary advancements, financial statements are viewed as one of the most comprehensive, impartial, and dependable sources of information, enabling users to form judgments about a company's financial situation and future prospects (Thalassinos & Liapis, 2014). In many countries worldwide, there is a legal obligation for accounting financial statements to be publicly available sources of information. With their composition, content, and presentation formats standardized by fundamental criteria, it becomes feasible to develop standardized methods for interpreting and analyzing them. (Suryanto & Thalassinos, 2017).

Consequently, investors in general and investors in shares in particular rely to a large extent on the content of publicly available information in form of financial statements for their various investment and the pricing of securities. Each of the financial statement required by law according IAS 1 serves different purpose of assessing the worth of the firm. Therefore, different investors depend on different financial statement for specific decision.

Share value is very vital to the owners of firms (shareholders), management as well as investors, they often rely on accounting information contained in the various financial statements for measuring these values. According to Meka and Nwadialor (2018), an increasing number of empirical studies indicate that, the financial statements of business encompass certain fundamentals that play very vital role in the path of their respective shares in the capital market and that variations in accounting information should instigate changes in the share price, if accounting information is useful to illustrate price variation, how does these affect the share price? How does the various components of financial statement affect share price?

In this paper therefore, our focus will be on the effect of cash flow statement on share prices of oil and gas firms listed in the Nigerian Exchange group Ltd. Though the effect of cash flow has been discussed in previous studies, however, the comprehensive exploration of the varied impacts of cash flows stemming from operational, investment, and financing activities impacting share prices appears to be lacking in existing literature. The overarching aim of this study is to analyse the effect of cash flows on the share prices of oil and gas companies quoted in the Nigerian Exchange Group.

Based on the above, the following hypotheses shall guide in the actualization the research objectives:

i. Hypothesis 1: Cash flows from operational activities do not have a significant impact on share price.
ii. Hypothesis 2: Cash flows from investing activities do not have a significant impact on share price.
iii. Hypothesis 3: Cash flows from financing activities do not have a significant impact on share price.
iv. Hypothesis 4: Net cash flows do not have a significant impact on share price.

LITERATURE REVIEW

The cash flow statement is pivotal for understanding a company's liquidity and solvency, crucial for its sustenance and expansion. It also enables analysts to use past cash flow data to forecast future cash flows, guiding economic decisions like those in NPV analysis. By summarizing significant shifts in financial standing over time, the cash flow statement sheds light on management priorities. For instance, an uptick in capital expenditure and development costs may signal potential growth in future revenue streams, while heavy investment in short-term ventures could suggest a lack of viable long-term prospects. Furthermore, comparing cash flows across different entities can reveal disparities in earnings quality, as cash flow data tends to be more objective compared to income statements, which can be influenced by varying accounting policies. Cash flow statements offer valuable insights into future cash flows and their uncertainty, aiding in assessing firms' market value (Akbar et al., 2011).

Krishnan and Largay (2000) emphasized the importance of forecasting future cash flows for firm valuation and investment analysis. The study examines the vital details presented in cash flow statements, such as cash flows from operating, investing, and financing activities, and analyse how they influence a company's value. Despite the longstanding requirement for cash flow statements, ongoing discussions exist regarding their usefulness, as pointed out by Barton, Hansen, and Pownall (2010); Kumar and Krishnan (2008); Subramanyam and Venkatachalam (2007); and Laswad and Baskerville (2007). Barton, Hansen, and Pownall (2010) observed that the characteristics of accounting figures may differ across markets, resulting in the categorization of cash flows into three main groups: operating, investing, and financing activities.

According to Glautier et al. (2011), cash is vital for a business, and a healthy cash flow is essential for its survival and growth. They emphasized that the statement of cash flows serves as a tool for management to avoid liquidity issues by revealing the cash generated by a business's operations and its allocation. The key aspects to consider in the cash flow statement are positivity, magnitude, and growth over time. Regardless of the level of cash flow achieved, attention should be paid to the three categories: operational, investment, and financial activities.

Investors should also understand which activities generate the most significant cash flows for the company and how these cash flows will be utilized. This understanding enables assessments of the company's future performance. Typically, companies with substantial cash reserves can meet obligations, distribute profits, and handle financial emergencies without borrowing or selling assets. However, it's important to note that high profitability doesn't necessarily translate to positive cash flow, as profitability can be influenced by non-cash items. Similarly, negative cash flow may not indicate poor company performance if the cash is being invested in assets that support future growth.

In line with International Accounting Standard 7 (IAS 7), companies must outline cash flows from operations, investments, and financing during the reporting period. Hence, Oroud et al. (2017) conducted a study to evaluate the significance of cash flows, especially in stock markets, investigating if cash flow information impacts the stock prices of listed firms. Their findings revealed that cash flows do play a statistically significant role in influencing the stock prices of listed companies.

Again, Osama and Mohamed (2016) investigated the relationship between cash flows and share prices within the banking sector from 2005 to 2014. Employing regression analysis to assess their hypotheses, the study unveiled a positive association between cash flows and share prices in the banking sector in Niger. They recommended that both current and prospective investors thoroughly scrutinize cash flow statements before making any investment decisions. In a similar vein, Ibrahim and Ahmad (2015) examined how the basic components of cash flow statements impact the stocks of commercial banks listed in the Amman Stock Exchange. Their findings indicated a restricted impact of cash flows from operating, investment, and financing activities on the market value of these banks' shares. Nonetheless, they recommended a heightened focus on cash flow when evaluating share worth.

Tehran et al. (2013) investigated how cash flows affect the investment levels of firms, discovering a noteworthy influence of cash flow on the sampled companies' investment levels. Abu Al-Rab (2019) noted a direct correlation between operating cash flows and share returns, highlighting that operational cash flows, especially those linked to credit facilities in the banking sector, significantly affect the determination of earnings per share and serve as critical indicators of financial performance.

Similarly, Al-Amoudi et al. (2011) recommended, based on their study of the relationship between changes in market share prices and cash flow, that successful management of cash flows leads to increased profits and subsequently higher returns on shares. Collins et al. (2014) and Fawzi et al. (2015) also found a significant relationship between cash flows from operational activities and share prices. For investment activities, Kroes and Manikas (2014) identified a strong relationship between cash flow from investment activities and stock returns. Nevertheless, Collins et al. (2014) identified a notable correlation between cash flows stemming from financing activities and share returns, which differs from the results reported by Shi et al. (2014), who found no association between cash flows from financial activities and share returns.

Cash Flows from Operational Activities

The primary sources of revenue for the reporting entity, separate from investing or financing activities, are its operational activities. Cash flow from these activities mainly stems from the core revenue-generating operations, influenced by transactions and other actions affecting profit or loss, as determined by the income statement and statement of financial position. Cash inflows encompass cash sales and collections from trade receivables, while outflows include payments for inventories, operating expenses, taxes, interest, and dividends. This section is significant for companies as it reflects their operational achievements and management of working capital (Libby, Libby & Short, 2014; Berry, 2011; McLaney & Atrill, 2014). Jabbari et al. (2013) suggest a negative correlation between operating cash flows and the risk of stock price crashes, based on their analysis of the Tehran Stock Exchange from 2006 to 2010.

A reporting entity must disclose cash flow from operating activities either through the direct method, which itemizes major categories of gross cash receipts and payments, or the indirect method, which adjusts profit or loss for the cash effects of non-cash transactions, deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows. However, the direct method, endorsed by Berry (2011), offers a comprehensive analysis of cash flows by examining accounts linked to operating activities. Barth et al. (2001) observed in their research that cash flows from operating activities outperform earnings in predicting future operating cash flows, thereby enhancing the predictability of future cash flows across operating, investing, and financing activities. Similarly, Ni et al. (2018) noted that while earlier studies using projected cash flow yielded mixed findings, recent research relies on cash flow data reported in cash flow statements, highlighting cash flow as a more effective predictor of future cash flows compared to earnings (Barth et al., 2001; Subramanyam & Venkatachalam, 2007).

Cash Flows from Investment Activities
Investing activities entail the purchases and sale of non-current assets including investments in other firms, excluding cash equivalents. According to Titman et al. (2011), cash from investment activities arise from the buy and disposal of non-current assets. Cash flow from investing activities encompasses changes in cash flow resulting from the acquisition and disposal of assets other than those primarily traded by the entity (e.g., inventory). It mainly consists of cash outflows from acquiring investments and fixed assets, cash inflows from investment income, and cash inflows from disposing of investments and fixed assets. For a company with investment opportunities, it is anticipated that outward cash movement (outflows) rather than cash inflows from investing activities will be more prominent in the cash flow statements. Therefore, Ni et al. (2018) noted that the higher ratio of cash outflows from investing activities to total assets excluding current assets is an indication of a positive sign meaning that it can be opine that expenditure on investing activities would boost the share price. Even though cash outflows may sometime be equal to cash inflows from investment activities as stated by Taillard (2012), Orhan and Basar (2015) are of the opinion that future investment will enhance the growth and survival of firms and so becomes more desirable.

Cash Flows from Financing Activities
Financing activities encompass actions that change the size and composition of a company's contributed equity and loans. Taillard (2012) describes financing as the process of obtaining capital to support various company needs, such as startup funding, expansion, basic operations, or other financial requirements. Essentially, financing activities involve cash received from issuing debt and equity, or disbursed as dividends, share buybacks, or debt repayments. Cash flows from financing activities encompass transactions not classified as operating or investing (Kousenidis, 2006).

The distinct disclosure of cash flows from financing activities is essential as it facilitates forecasting future demands on cash flows by those providing capital to the reporting entity. Transactions related to investing and financing that do not entail cash or cash equivalents are omitted from the cash flow statement and presented elsewhere in the financial statements to furnish pertinent details about these activities. In essence, cash flow from financing activities encompasses alterations in cash flow stemming from proceeds from issuing share capital, debentures, and bank loans, cash outflows associated with finance charges (e.g., dividends and interest expense), and cash outflows for share repurchases and debt repayment.

Concept of Share Price
The activities of capital market in general are driven by the forces of demand and supplies. It is a place for trading in securities and for every trading activity there must be an exchange of value in form of prices. The share price, also known as share value, denotes the price or worth of an individual share among a quantity of tradable shares of a company. Simply put, it is the highest price a buyer is willing to pay for the share or the lowest price at which it can be acquired. According to Etale and Bingilar (2016), the share price refers to the cost of an individual share from a pool of available shares of a company. It is obviously one of the most important yardsticks in determining the value of a firm (Mohtadi & Agarwal, 2004). Afolabi and Dada (2014) stated that the upward or downward movements of price of a share depends on the supply and demand for the share at any point in time. This demand and supply indicate the quantity of that share that investors and potential investors are ready to buy or sell at every

point in time as well as backed up with the ability to pay. The economic law of demand is also applicable to share trading meaning that when the supply is more than the demand there is a tendency that the price of such share will drop because of the excess of supply over demand. In a similar way, when the demand exceed supply, the prices of such share will soar high. The rise and fall in share price are a continuum therefore, investors can gain or lose depending on when they decide to sell or buy shares.

METHODOLOGY

The research employs a correlational research design, which involves examining the relationship between two or more variables to explain and predict their association. Secondary data extracted from published accounts of firms and the Nigerian Exchange Group spanning the period from 2011 to 2023, covering a ten-year duration, are utilized. The study population consists of 10 oil and gas firms listed on the floor NGX as of December 31, 2023. Due to the relatively small size of the population, the study will employ a census sample size to achieve higher precision and avoid sampling errors.

The method of analysis for this study is panel regression analysis based on the Dynamic panel data (Generalised Moment of Method) collected from the financial statements of firms as well from the Nigerian Exchange Group.

Model Specification

$SP=\alpha+\beta_1CFOA+\beta_2CFIA+\beta_3CFFA+NCF+\varepsilon$ --1

Where SP is the end of year share price which is the dependent variable

CFOA represents the cash flow from operational activities

CFIA represents the cash flow from investing activities

CFFA represents the cash flow from financing activities

NCF is the net cash flow

The proxy for the independent variables is CFOA, CFIA, CFFA and NCF respectively.

The symbol α stands for the intercept of the regression model; β_1, β_2, and β_3 stands for the coefficients of each independent variable in the model

RESULTS AND DISCUSSION

Descriptive Analysis

Table 1: Descriptive statistics

Variables	Mean	Std. Dev.	Minimum	Maximum
SP	30.0452	47.2425	0.49	275
CFOA	0.0136	0.1008	-0.7968	0.3587
CFIA	-0.0277	0.1238	-0.9535	0.0097
CFFA	0.0103	0.0964	-0.1771	0.7081
NCF	-0.0058	0.0843	-0.7508	0.3128

STATA 14 output (2024)

Table 1 shows that on average, listed oil and gas firms in Nigeria have share price of 30.0452. This implies the sector on average generate ₦30.0452 share price annually. The standard deviation also shows that the share price values vary around the mean and among firms, indicating a wide degree of dispersion. The minimum and maximum range from ₦0.45 to ₦275 demonstrates the diversity in share price. The man of the cashflow from operation of 0.136 shows that on average, the firms show a poor cashflow from operation. However, the higher standard deviation implies more variability in cashflow from operation. Moreso, the minimum and maximum of -0.7968 and 0.3587 respectively, the range indicates the broad spectrum of cashflow from operation observed.

The average cashflow from investment is -0.0277, reflecting the firms' overall cashflow from investment, which indicates low CFI and implies that the firms cashflow outflow through is higher than inflow. The standard deviation of 0.1238 is relatively high standard deviation suggests significant dispersion in CFI. The minimum of -0.9535 and maximum of 0.0097 shows extreme values highlight potential outliers affecting the average. The cashflow from financing activities shows that on the average CFF is 0.0103 which indicate low financing cashflow and the standard deviation shows a wide deviation around the mean of the sampled oil and gas firms which is 0.0964. This is supported by minimum and maximum value of -0.1771 and 0.7081. In addition, the results shows that net cashflow documented mean value of -0.0058, that is the average NCF is negative, indicating poor net cashflow. On the other hand, the standard deviation of 0.0843. The high standard deviation implies high variability in NCF. The minimum of -0.7508 and maximum of 0.3128, the range suggests a relatively unstable NCF across firms.

Correlation Analysis

Table 2: *Correlation matrix*

Variables	**SP**	**CFO**	**CFI**	**CFF**	**NCF**	**VIF**
SP	1.0000					
CFOA	0.0221	1.0000				3.64
CFIA	0.0343	-0.3933	1.0000			8.15
CFFA	0.1515	-0.3667	0.0583	1.0000		2.14
NCF	-0.1684	0.5284	0.0312	-0.0361	1.0000	2.75

Note. STATA 14 output (2024)

Table 2 displays the coefficients of correlation between the share price and cash flows. Additionally, it presents the correlation matrix, indicating the Spearman correlation coefficient values between all pairs of the research variables. The selection of the Spearman correlation method over the Pearson correlation method is due to the outcome of skewness and Kurtosis and Shapiro Wilk test indicate that the data are not normally distributed. In addition, the Variance Inflation Factor shows that there is absence of multicollinearity, none of variable has 10 VIF (Gujirati, 2009). The highest VIF is cashflow from investment of 8.15 and the minimum VIF is 2.14 which is cashflow from financing activities.

Table 2 shows that cash flow from operational activities, cashflow from investment and cashflow from financing correlates positively with share price between 2011 and 2023 at correlation value of 0.0221, 0.0343 and 0.1515 respectively. Addition, the correlation coefficients are all weak. This also indicates that cashflow from operation, cashflow from investment and cashflow from financing and share price moved in same direction. This suggest that an increase in CFO, CFI and CFF would lead to equal increase in share price.

Table 2 also reveals that the sign of the pairwise correlation coefficient between the net cashflow and share price, the result shows that NCF associate negatively with share price, though the relationship is weak at correlation coefficient value of -0.1684. This suggest that NCF and share price moved in separate way. An increase in NCF led to equal decrease in share price.

Pre estimation tests

Table 3: Pre and Post Estimation Test

Variables	SP lag Coefficient
Fixed effect	0.6770
Ordinary Least Square	0.8161
One step difference GMM	0.6770
Two step difference GMM	0.6937
One step System GMM	0.8161
Two step system GMM	0.8097
Hettest	0.2214
Arellano-Bond test for AR(1)	0.059
Arellano-Bond test for AR(2)	0.963
Hansen test of overid	0.340
Sargan test of overid	1.000
Hansen test excluding group	1.000
Difference	1.000

In order to choose between the system GMM and difference GMM the study use bond (2001) two thumb rules. The guideline specifies that if the discrepancy between the GMM estimates of the lagged dependent variable is approximately equal to or less than the fixed effects estimates, it indicates that the difference GMM estimate is also downwardly biased due to weak instrumentation. Hence, the system GMM estimator should be favoured in such cases. From Table 3 it indicates that fixed effect coefficient is 06770 less than the two-step difference GMM of 0.69 37. This suggesting diminishing lag ROA effects. The choice of the two-step system GMM is supported, indicating a more appropriate model specification for improved estimation.

AR(1) and AR(2): The probability values of 0.2214 and 0.059 indicate that there is no autocorrelation in the first and second differences of the dependent variable. Implication: The model adequately addresses autocorrelation issues. Sargan Test Over-identification: The probability value of 0.340 suggests that the instruments used in the analysis are not over-identifying the model. Implication: The instruments are valid for the specified model. This indicates the model is not over-identified, meaning there are not too many instruments compared to the variables being estimated. This is good because it reduces the risk of bias. Sargan Test (p-value = 1.000): Similar to Hansen J Tests, this test also supports the validity of the instruments.

Hansen Test: The probability value of 1.0000 and 0.340 indicates that the model is not suffering from overfitting. Implication: The instruments used in the analysis are valid and do not lead to model overfitting. Hansen J Tests (p-values = 0.340 and 1.000): Both tests fail to reject the null hypothesis of instrument validity, suggesting the instruments are not weak and are validly correlated with the independent variables. Heteroskedasticity Test (hettest): Significant chi2(1) statistic and p-value of 0.2214 indicate the absence of heteroskedasticity.

This implies that varied levels of variability in the error term across observations may not affect the efficiency of coefficient estimates. Autocorrelation and Heteroscedasticity Tests (p-value = 0.354): No evidence of autocorrelation or heteroscedasticity, meaning the errors are not serially correlated or have unequal variances, ensuring reliable estimates.

Table 4: GMM Regression Results

Variables	Coefficient	T	P>|t|
l.SP	0.6937	33.02	0.000
CFOA	-11.8212	-0. 14	0.888
CFIA	13.1272	20.17	0.000
CFFA	-75.1995	-1.08	0.302
NCF	23.1432	0.26	0.799

Source: STATA 14 Output (2024)

Table 4 shows that lagged share price has positive and substantial effect on share price at coefficient value of 0.6937 and significant at 1% level of significance. The results implies that a unit increase of lagged share price would as well increase share price by 0.6937 units. A positive and significant effect exists, indicating that past share price efforts influence current decisions, potentially due to learning or momentum effects. Table 4 shows that cash flow from operations has coefficient value of -11.8212 and p-value of 0.888. This indicates negative and insignificant effect of CFO on share price, suggests a slight decrease in share price for every 1% increase in operating cash flow, but the relationship is statistically weak. This might be due to other factors impacting share price more than operating cash flow in the Nigerian context. The finding does not provide enough evidence to reject the null hypothesis which states that cashflow from operation activities does not have significant effect on share price of listed oil and gas firms in Nigeria. The finding also disagreed with the findings of Abu-Alrab (2019); Fawzi et al. (2015); Collins et al. (2014).

On the other hand, cash flow from investments has coefficient value of 13.1272 and p-value of 0.000 which is significant at 1% level of significance. It is a strong positive and significant effect of CFI on share price which indicates a clear increase in share price with a 1% increase in investment cash flow. This aligns with the theory that investments in exploration, development, and infrastructure lead to future growth and profitability, driving up share prices. The finding provides enough evidence to reject the null hypothesis which states that cashflow from investment activities does not have significant effect on share price of listed oil and gas firms in Nigeria. The study finding agreed with the findings of Kroe and Manikas (2014); Collins et al. (2014). Table 4.4 further documented that cash flow from financing has negative coefficient of -75.1995 and p-value of 0.302. This suggests a potential decrease in share price with higher financing cash flow. A negative and insignificant effect implies a potential decrease in share price with a 1% increase in financing cash flow, but again, the relationship is not statistically significant. This could be due to concerns about increased debt burden or dilution of shareholder value through financing activities. *The finding does not provide enough evidence to reject the null hypothesis which states that cashflow from financing activities does not have significant effect on share price of listed oil and gas firms in Nigeria.* The finding supports the finding of Shi et al. (2014).

Table 4 also shows that holding all other explanatory variables constant, a 1 percent rise in net cashflow will result in a corresponding 23.1432 unit increase in the share price capacity of the listed firms over the period 2011 to 2020. Although, the effect is insignificant. In addition, the negative coefficient suggests that as firm net cashflow increases firms pay less attention to increase share price. Also, this can be attributed to the fact that some firms have large net cashflow at the end of accounting year, this resulted to poor share price. *However, the study does not provide enough evidence to reject the null hypothesis that states net cashflow does not have significant effect on share price of listed oil and gas firms in Nigerian.* However, the finding is consistent with findings of Oroud et al. (2017); Osama and Mohammed (2016); Tehran et al. (2013) who documented negative and insignificant effect of net cashflow on share price. Inconsistent with the finding is the finding of Ibrahim and Ahmad (2015) who study revealed that net cashflow has positive effect on share price. The relationship between net cashflow per share and share price is indicative of an insignificant negative effect because the higher the proportion of net cashflow in total share, the lower the possibility that the firms will likely increase share price since there is availability of cash at the end of the accounting which may meet their immediate obligation that needed cash.

Generally, a negative and insignificant impact of cash flow from operation does not aligns with expectations, the insignificance suggests other factors might play a more significant role in driving share prices. While the negative relationship between cash flow from financing could be expected due to debt burden, the insignificance indicates it might not be a major determining factor for share prices. The Positive and significant effect of cash flow from investment activities, net cash flow on share price reinforces the importance of strategic investments in driving share price growth.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Cash flow from investments has a significant positive impact on share prices of Nigerian oil and gas firms, while the effects of operating, financing cash flow and net cashflow are weaker and statistically insignificant. The findings partially support the theory that positive cash flow, particularly from investments, can influence share prices in Nigerian oil and gas firms. However, the weak or insignificant impact of operating, financing cash flow and net cashflow suggests other factors play a significant role in the Nigerian context.

Recommendations

In view of the findings and conclusion, the study recommends that oil and gas firms in Nigeria should prioritize investment activities that generate strong cash flow and communicate their growth strategies effectively to investors. Investors should consider a broader range of factors beyond just cash flow when making investment decisions in the Nigerian oil and gas sector. Regulatory bodies could consider initiatives to enhance transparency and investor confidence in the Nigerian oil and gas market. Additionally, manage financing activities prudently to avoid negative impacts on share price. Firms should conduct regular assessments of their cash flow management practices to optimize performance and shareholder value.

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RISK COMMITTEE ATTRIBUTES, FINANCIAL LEVERAGE AND MARKET PERFORMANCE OF LISTED MANUFACTURING FIRMS IN EMERGING ECONOMY

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Abstract
The study examines the moderating effect of financial leverage on the relationship between risk management committee (RMC) attributes and the value of listed manufacturing firms in Nigeria. A correlational research design was adopted in the study. The sample consists of forty (40) manufacturing firms from five (5) sectors that are listed on the Nigerian Exchange Group (NGX). The data was gathered from the firms' annual financial reports, which covered an eight-year period from 2015 to 2022.The multiple regression method was adopted to test the hypotheses. The result of Panel Corrected Standard Errors (PCSEs) estimates shows that RMC expertise has a significant positive impact on firm value. In addition, RMC size, independence, gender diversity, and overlapped directors have a negative and significant impact on firm value, while RMC diligence has a positive but insignificant impact on firm value. Furthermore, RMC diligence, independence, and overlapped directors have a significant positive impact on firm value after the interaction with the moderating variable financial leverage. The findings of this study offer an immense insight for the regulators of corporate governance (CG) code reforms in Nigeria to review and strengthen the existing CG code where necessary. More so, this study recommends that the Financial Reporting Council of Nigeria (FRCN) should ensure that the risk management committee consists of members with diverse backgrounds and expertise in risk management. The firm's management should aim for an optimal balance between debt and equity financing based on its risk appetite and ability to meet debt obligations. In addition, the RMC of the firm should establish key performance indicators to assess the level of its risk management efforts. Finally, the firm's management should strive to foster collaboration and communication between the risk committee and the top management of the firm.

Keywords: Corporate Governance, Risk Committee, Financial Leverage, Firm Value

INTRODUCTION

Market performance represents the sum of all the assets, liabilities, and future cash flows of the business. It is influenced by a range of factors, such as the firm's profitability, growth prospect, market position and risk profile. It is an important metric used by investors, analysts, and management to evaluate the performance of a firm and its potential for growth. The goal of corporate finance decisions in the long run is to maximize shareholder's wealth and investment. The market performance of a firm is closely linked to its ability to effectively manage risks. A risk committee plays a critical role in helping a firm to identify, assess, and manage risks, which in turn can help to preserve and enhance the market value.

The concept risk represents future uncertainty that contains a material effect that is capable of affecting goals of the firm. However, Hespenheide et al. (2007) acknowledged an intelligent risk management approach that accepts risk as indispensable for doing business. However, a firm may evaluate the type and level of risk before adopting it as an essential condition in its business operations. The RMC's scope of work includes the intelligent risk approach that informs the board and management of the critical risks associated with the firm's business. If practiced well in the firm, the method, including strategic and tactical actions, can create market value (Bugalla et al., 2010). Risk management adds value to the firm and creates economic growth by decreasing the cost of capital and activities related to business uncertainty (Nourbakhshian et al., 2013).

An effective risk management committee should have a diverse range of skills and expertise to ensure that all potential risks are adequately identified and addressed. A committee made up of individuals with different backgrounds and experiences can bring about range of perspectives, which can help the firm identify risks that may have been overlooked. For example, a committee member with background in finance, accounting, or related field can help identify risks associated with financial mismanagement, operational inefficiencies, or regulatory compliance issues. Furthermore, the committee should have members who are independent and objective, ensuring that they are not influenced by personal or business interests. This independence can help the committee make objective decisions regarding risk management, which is critical in mitigating potential risks that could negatively impact the organization's value. Additionally, independence can provide stakeholders with confidence in the committee's decision-making processes, thereby enhancing the firm's reputation and value.

Manufacturing firms, despite their vital role in economic growth and employment generation, encounter numerous challenges that impede their ability to enhance its market performance. These challenges often stem from internal and external factors, ranging from operational inefficiencies to external market dynamics. Addressing these practical problems is crucial for manufacturing firms to optimize its value proposition and remain competitive in today's dynamic business landscape.

These challenges encompass the components of modern corporate risk management, such as supply chain management risk. Manufacturing firms emerging economies like Nigeria often face disruptions in their supply chains due to various factors, such as raw material shortages, transportation issues, geopolitical tensions, and natural disasters. These disruptions not only lead to production delays but also impact customer satisfaction and profitability, ultimately affecting firm value. Operational risk exposures involving inefficient production processes, outdated technology, and poor resource utilization can significantly hinder a manufacturing firm's ability to improve productivity and reduce costs. Addressing these operational inefficiencies is essential for enhancing operational excellence and thereby boosting firm value.

Information technology risk which involves the rapid pace of technological advancements, presents both opportunities and challenges for manufacturing firms. Adopting emerging technologies such as automation, artificial intelligence, and the Internet of Things (IoT) can improve efficiency and competitiveness. However, integrating these technologies into existing operations while ensuring a return on investment poses challenges for the firms, affecting their ability to enhance its market performance. These firms face intense competition from both domestic and international players, which is often characterized by price wars and aggressive market strategies. Competing in this global marketplace requires continuous innovation, strategic positioning, and cost-effective operations to maintain and enhance firm value.

Manufacturing firms in Emerging economies contend with a complex regulatory environment characterized by inconsistent policies, bureaucratic hurdles, and regulatory compliance challenges. Uncertainty surrounding government policies, tax regimes, and trade regulations creates a challenging business environment, hindering investment, innovation, and growth initiatives, thereby constraining firm value. Also, limited access to affordable financing options is a pervasive issue for manufacturing firms in Nigeria. High interest rates, stringent collateral requirements, and a lack of credit facilities impede firms' ability to invest in modern technologies, expand operations, and optimize production processes. This financing gap stifles growth opportunities and inhibits value creation for manufacturing firms. The firms are susceptible to market volatility and currency fluctuations, which impact input costs, pricing strategies, and profit margins. Instability in exchange rates, inflationary pressures, and economic uncertainties undermine firms' financial performance and erode firm value over time.

Despite the growing importance of corporate governance in enhancing performance, there exists a significant population gap in empirical studies focusing specifically on Nigerian manufacturing firms. Existing research predominantly focuses on financial, banking and insurance sectors, overlooking the unique contextual factors and challenges faced by manufacturing firms operating in emerging economies like Nigeria. As a result, there is a dearth of comprehensive empirical evidence that directly addresses the relationship between risk committee attributes, financial leverage, and market performance within the Nigerian manufacturing context (see, for example, Yahaya & Ogwiji, 2021; Virginus et al., 2021; Chukwujekwu et al., 2020; Fali et al., 2020; Kakanda et al., 2018; and Jimoh & Attah, 2017). This population gap limits the applicability of existing governance models and best practices, necessitating tailored research efforts to fill this critical gap in the literature.

The literature on the relationship between risk committee attributes and performance in manufacturing firms, particularly within the Nigerian context, is sparse and fragmented. While existing studies have examined the impact of some RMC attributes financial performance, few have explored the nuanced interaction between risk oversight practices, financial leverage, and value creation specifically within the manufacturing sector (see, for example, Malik et al., 2021; Boudiab & Ishak, 2020; Kakanda et al., 2018). The existing literature often lacks consensus on the effectiveness of different governance mechanisms in mitigating risks and enhancing firm value, highlighting the need for more rigorous empirical studies to reconcile conflicting findings and generate actionable insights for practitioners and policymakers Moreover, the study expanded the model by examining additional variables such as overlap directors, gender diversity and introducing a moderating variable financial leverage.

Methodologically, the existing research on corporate governance and firm performance is characterized by a lack of consistency in measurement approaches, sample selection criteria, and statistical techniques employed. Variations in research methodologies make it challenging to compare findings across studies and draw definitive conclusions about the relationship between risk committee attributes, financial leverage, and firm value. Furthermore, methodological limitations such as sample bias, endogeneity concerns, and data availability constraints undermine the validity and generalizability of empirical findings, necessitating more robust research designs and analytical frameworks to address these methodological gaps effectively.

When making economic decisions, creditors and other stakeholders are interested in the firm market performance. The cost of capital is directly proportional to the firm's value. The lower the cost of capital, the higher the firm's worth. This means that capital providers view firms with low market value as high-risk, resulting in higher interest rates on loans than firms with higher market value. The financial and market worth of a firm are critical pieces of information for lenders and other stakeholders. As a result, corporate executives are faced with the challenge of determining the optimal financing choice that will have an influence on the firm's value and long-term viability. The financing options available are a combination of equity and debt, categorized as an essential issue encountered by a firm's financial manager. This financing mix may influence the value of the firm, either positively or negatively. Prior studies have shown a positive relationship between financial leverage and firm value (Berger et al., 2006; Hadlock & James, 2002; Ghosh *et. al*., 2000).

In reality, determining the best capital mix is a difficult task for corporate managers. To reach an exact combination that can optimize its worth, a firm may need to issue various securities in a mix of debt and equity. The firm has attained its optimal capital mix if the capital combination can maximize its value. According to Jensen and Meckling (1976), the level of financial leverage in a firm's capital structure reduces agency conflicts between managers and shareholders and so can influence manager behavior and operational decisions. This is in tandem with Harris and Raviv (1991), as well as Graham and Harvey (2001). The failure of the firm can be attributed to inefficient financing and capital structure decisions (Mwangi et el., 2014).

LITERATURE REVIEW

Market Performance

The net worth of a firm at any one time is known as market value. The term "market performance" is occasionally used to describe it. Market performance is a term used to describe how much an asset or firm is worth in a financial market. One of the most important financial metrics that attracts investors and other stakeholders is market value. The goal of corporate finance decisions in the long run is to maximize shareholders wealth and investment. The measure of a firm's value is an indicator of the size of its asset. The firms with a larger total asset value have reached a stage of maturity where the cash flow has been positive and the firm is considered to have good prospects within a relatively long period. However, it also shows that the firm is relatively more stable and capable to generate profits than firms with low value (Daniati, 2006).

Empirical Review

There has been an increase in studies on risk management related topics as seen in the last decade. Arevalo (2021) posits that firms should introduce a framework to control financial risks to avoid excessive indebtedness associated with economic growth. Previous studies have found that the RMCs influence the decision-making process. For instance, Subramaniam, et al. (2009) studied the stand-alone RMCs, the governance practice, and financial reporting quality. The findings revealed a significant positive relationship between separate RMC and improved corporate practices, and enhanced financial reporting quality. Ng, et al. (2012) studied the relationship between RMC attributes and risk-taking in Malaysian insurance firms. The study documented that RMC size and independence appear to be negatively associated with underwriting risk while the frequency of RMC meetings is insignificant.

Abdullah et al. (2015) studied the RMC attributes and hedging activities and information disclosure among listed Malaysian firms. The finding revealed RMC independence has significant negative influence on hedging activities and information disclosure. While RMC meetings has positive impact information disclosure. Wu et al., (2016) studied RMC characteristics and prestige on the efficiency of listed Malaysian firms. The finding revealed that the RMC influences the efficiency level of the listed firms in Malaysia. Terjesen et al., (2016) documented that an RMC is anticipated to positively influence the role of risk oversight functions, which will improve the corporate's performance and firm value.

Kallamu (2015) examines the risk management committee characteristics and the market valuation and accounting return in Malaysia. He documented a significant positive relationship between RMC independence and firm market valuation. Jia (2019) studied the effects of RMC diversity gender on a firm's probability of having financial distress. The study revealed a negative significant relationship between RMC gender and the likelihood of financial distress.

Elamer and Benyazid (2018) studied The Impact of the Risk Committee on the Financial Performance of UK Financial Institutions. The findings indicate a negative relationship between RMC size, expertise, meeting frequency, existence, independence and performance. Boudiab and Ishak (2020) examined RMC attributes and the performance of non-financial listed firms in Malaysia. The findings revealed that RMC size and training have a significant negative relationship with performance while diligence has an insignificant association with performance. Ramlee and Ahmad (2020) examined the Malaysian risk management committee and the financial performance of listed firms. The findings indicate that a chief risk officer, RMC knowledge, and expertise have a significant influence on a firm performance.

Hypothesis Development

Risk management committee size

The agency theory asserts that RMC size enables proper management and monitoring of risks by the firm's management. Ensuring compliance with firm policies, programs and report of findings to the mainboard (Alles et al., 2005). A larger RMC size exists due to the likelihood of high agency costs because of high leverage and greater complexity in a firm's operation (Subramaniam, et al., 2009). It was argued that Boards with a separate stand-alone committee focus solely on the risk management function and demonstrates a commitment to improving the overall corporate governance structures of the firms (Yatim, 2010). The resource dependency and agency theory have argued that a handful of boards is instrumental in appropriate counselling and providing advice regarding the firm's strategic options (Pearce & Zahra, 1991). According to Zahra and Pearce (1989) boards with larger sizes are sometimes treated as more proficient in examining the activities and decisions of top-level management as it is harder for the CEOs to dictate larger board. Likewise, Ahmed et al., (2015), opined that larger boards significantly improve corporate performance based on the high level of skills. Essential information regarding the various levels of risk factors and strong justification may directly provide insight and worthy ideas that reduce internal agency issues.

H1. There is a positive impact of RMC size on market performance.

Risk management committee diligence

Frequency of meetings are important in defining the efficacy of the RMC board members (Kakanda, et al., 2018; Ng, et al., 2012; Yatim, 2009). RMC members can easily communicate, discuss, and attain a shared objective through meetings and identify the risk factors observing and keeping a sharp eye (Kakanda, et al., 2018; Ng, et al., 2012). Additionally, committee meetings ensure that every member of the committee keeps updating themselves on actions controlling the risk factors after a certain amount of continuous efforts (Kakanda, et al., 2018; Ng, et al., 2012; Yatim, 2009). Common anticipation is that regular meetings can ensure a concrete and vigilant mechanism that helps decide firm matters (Ng, et al., 2012). Furthermore, Yatim (2010) claims that the RMC members are diligent in their oversight responsibilities, especially RMC activities, besides improving communication amongst them and motivating the RMC board members to take an efficient initiative to control the risk factors and oversights. RMC diligence is seen as a significant step taken by the board of directors to accomplish those overlooked by the management (agent). RMC has a central role in acting as the main body. Moreover, agency theory further supported this statement.

For the resource dependency theory, an RMC meeting has a significant role in disseminating information and knowledge with experts, a key and technical asset for the firm. The main objective of the Committee meeting is to reduce issues, discuss valuable ideas and provide complete guidance to the management to resolve the contemporary issues raised by uncertain factors. Following resource dependence theory, frequent board meetings bring outside resources. During the meeting discussion, the directors bring their expertise and knowledge as essential resources, contributing to efficient decision-making. Zaman, Hudaib and Haniffa (2011) argue that the Frequency of meetings is linked to higher effectiveness while a lower frequency of meetings indicates lower effectiveness. Therefore, the frequency of meetings reflects the diligence of the RMC.

H2. There is a positive impact of RMC diligence on market performance.

Risk management committee expertise

The agency theory explained that regular training and educational programs are essential to board structures. Similarly, consistent with the resource dependency theory, member’s expertise and qualification may patronize the competencies needed by RMC members and the organization. RMC members should have adequate Accounting, finance knowledge, especially on risk portfolio, internal control and risk management, guaranteeing the monitoring role is accomplished perfectly. In consistent with the resource dependence theory, member’s qualifications and knowledge may positively add to the competencies needed by RMC members and the organization. Mas’ud (2020) documented a significant relationship between qualified RMC members and corporate performance. Sub-committee members should be well equipped in terms of experience and should be well trained to understand risk management activities (Yatim, 2009). Adequate training for RMC members will ensure the oversight role is performed as intended. Moreover, the effective risk oversight function is achieved by directors' possessing diverse skills and experiences gained through education needed to perform effective risk oversight.

H3. There is a positive impact of RMC expertise on market performance.

Risk management committee independence

The independent RMC members are expected to secure all the necessary information and withstand any pressure from managers to control the firm risk, thereby enhancing firm performance. The revised code of corporate governance (2018) stated that the chairman of the

RMC should be a non-executive director. Many other corporate governance codes worldwide require firms to constitute their RMCs with a majority of independent directors to carry out their functions independently. Following the agency theory proposition, non-executive directors can monitor and detect any self-interested actions by management and reduce the agency costs. Kallamu (2015) documented that the existence of RMCs that have the majority of independent non-executive members has a significant positive impact on corporate performance and market valuation. In addition, Wu, et al. (2016) found that the proportion of independent members in the RMCs has significantly and positively affected the efficiency of firms.

H4. There is a positive impact of RMC independence on market performance.

Overlap director

Hines, Masli, Mauldin, and Peters (2015) argue that corporations with directors sitting in different board sub-committees report a higher quality of accounting information and bear lower audit fees. Consistently, Coles, Daniel, and Naveen, (2015) provided empirical evidence on the joint membership of board members and their effects on the firm value. The study utilizes data of 1500 US-listed firms for the period 1996-2014 and questions "do overlap directors influence the firm value". Their findings indicate that he overlapped directors positively influence the firm value in complex firms and teamwork.

H5. There is a positive impact of overlap directors on market performance.

Risk management committee diversity

A higher level of gender diversity on the board sends a signal of independence and transparency to the Firm's external environment, particularly its stakeholders (Rose, 2007; Lückerath & Rovers, 2013). In this study, female representation is assessed in absolute terms as the number of female members of the risk committee. The information comes from an annual report's corporate governance sections (Malik, 2017). This is in tandem with the provision of the Nigeria code of corporate governance, mandating firm with separate risk committee to have one or more directors to belong to both risk committee and the audit committee.

H6. There is a positive impact of RMC diversity on market performance.

Leverage as a Moderating Variable between RMC Attributes and market performance

Financial leverage has been employed as a moderating variable in many previous research (See, for example, Dahiyat & Bawaneh, 2021; Bashir & Asad, 2020; Abubakar, et al., 2020; Osabe, et al., 2019; Osazuwa & Che-Ahmed, 2016).Debt financing or leveraging can be referred to as application of money borrowed by firms to enhance their performance, and has been widely utilized by various studies that examines the relationship between performance of firms and corporate governance, who found a positive effect of leverage on financial and market performance (Chiang & Lin, 2011; Hurdle, 1974; Kang & Kim, 2011; Kyereboah, et al., 2006). This direct relationship between financial leverage and firm value is in line with Kenny and baron (1986) predicate of moderation.

Jensen and Meckling (1976) demonstrate the level of financial leverage in a firm's capital structure reduces the agency conflicts between managers and shareholders and, thus, can modify manager's behaviours and operating decisions. This position is confirmed by Harris and Raviv (1991); Graham and Harvey (2001). The firm's failure can be caused by finance decisions that resulted in specific suboptimal financing and capital structure decisions. Investors and firm management are both concerned about the existence and attainment of an optimal capital structure. Because the purpose of all financing decisions is to maximize shareholder wealth, the most straightforward approach to assess the value of any financial decision is to look at its impact on the firm's value and performance (Mwangi et al., 2014). Leverage can also boost a firm's value by reducing conflicts between shareholders and managers over free cash flow, the level of risk to take, and the best investment strategy (Myers, 1977).

H7. Financial leverage can moderate the relationship between risk committee and market performance.

Theoretical framework

Shareholders and corporate management are the most commonly cited example of an agency relationship. The shareholder's goal is to maximize their wealth by ensuring that the firm's value rises. On the other hand, corporate management tries to maximize personal incentives and benefits from the firm. The principal incurs agency costs as a result of the necessity to supervise the behaviour of the agent who has been entrusted with managing the firm's assets, but whose interests are not aligned with that of the owners (Deegan, 2009). The costs of monitoring may include the necessity for an external audit function (Gaffikin, 2008). Other costs, such as bonding costs, residual loss costs, and political costs, may be spent in addition to the cost of monitoring the conflicts connected with the agent/principal relationship (Gaffikin, 2008). In theory, the numerous costs arising from disputes within the agent/principal relationship are the result of corporate management's opportunistic behaviour. Corporate governance mechanisms in an agency theory environment, solve agency difficulties and avoid opportunistic behaviour. According to Burton (2000), the best way to control agency expenses is to limit management discretion by developing systems to monitor and supervise management behaviour. An independent board of directors, independent chairman, and independent board sub-committees such as the risk management committee are examples of such structures (Dalton et al., 1998).

The resource dependence theory was propounded to describe how organizations interact, but it may also be used to look at how firms are structured. Organizational governance, as used in this context, refers to the efficient corporate structures that could promote resource development. The board of directors, for example, contributes to the company through their knowledge and connections to other companies, and they also work to improve the firm's reputation and value. The board of directors has the potential to be an important source of social and human capital. Social capital, on the other hand, relates to assets like respectability and relationships with other businesses, whilst human capital refers to the director's advice and talents. These resources are referred to as the board capital. An association between board capital and company success and value has been found in prior studies (Dalton et al., 1998; Pfeffer 1972).

The static trade-off hypothesis, according to Kraus and Litzenberger (1973), argues that firms, trade the benefits and costs of debt and equity financing to arrive at an optimal capital structure after accounting for market imperfections such as taxes, bankruptcy costs, and agency costs.

According to the hypothesis, there is a benefit to debt financing, namely a tax benefit. However, there is a cost of borrowing money, particularly the indirect costs of bankruptcy and the more direct consequences of financial misery. As a result, the trade-off that all organizations seeking to maximize value should consider when determining the amount of debt and equity required to fund their operations. Needless to say, there comes a point where the marginal advantage of further debt increases diminishes as debt grows, whereas the marginal cost grows. As a result, the optimal capital structure is determined according to this trade-off theory of capital structure. The net tax benefit of debt financing offsets leverage-related costs such as financial hardship and bankruptcy, as well as the holding firm's assets and investment decisions constantly.

METHODOLOGY

Data for this study were obtained from the yearly financial reports of manufacturing firms listed on the Nigeria Exchange Group, using an ex-post facto research design. All fifty-six of the Manufacturing companies that were listed as of December 31, 2022, make up the study's population. Purposive sampling technique was employed, a criterion to narrow down the sample, requiring that the firm have a separate RMC and have been listed within the study's time frame. Only 40 out of 56 firms remained after 16 firms were removed from the sample. The investigation lasted for eight years (2015-2022). This time frame was chosen because it coincided with the advent of IFRS and the strict regulatory requirements.

Model specification

The following model is presented for this study

$$MP_{it} = \beta_0 + \beta_1 RMCS_{it} + \beta_2 RMCD_{it} + \beta_3 RMCE_{it} + \beta_4 RMCI_{it} + \beta_5 OD_{it} + \beta_6 RMCG_{it} + \varepsilon_{it} \qquad (1)$$

$$MV_{it} = \beta_0 + \beta_1 RMCS_{it} + \beta_2 RMCD_{it} + \beta_3 RMCE_{it} + \beta_4 RMCI_{it} + \beta_5 OD_{it} + \beta_6 RMCG_{it} + \beta_7 FLEV + \varepsilon_{it} \qquad (2)$$

$$FV_{it} = \beta_0 + \beta_1 RMCS{*}LEV_{it} + \beta_2 RMCD{*}LEV_{it} + \beta_3 RMCE{*}LEV_{it} + \beta_4 RMCI{*}LEV_{it} + \beta_5 OD_{it}{*}LEV_{it} + \beta_6 RMCG{*}LEV_{it} + \varepsilon_{it} \qquad (3)$$

Where β_0 is constant for all firms over the period
MV_{it} = Market Performance
$RMCS_{it}$ = Risk Management Committee Size
$RMCD_{it}$ = Risk Management Committee Diligence
$RMCE_{it}$ = Risk Management Committee Expertise
$RMCI_{it}$ = Risk Management Committee Independence
OD_{it}= Overlap director
RMCG = Risk management committee gender diversity
LEV_{it} = Financial Leverage
ε_{it} = Error term for all firms over the period

The variables under study were measured using measurements adapted from the literature, as displayed in Table 1.

Table 1: Measurement of variables

Variables	Acronym	Measurement	Sources
Market performance	MP	(Tobin's Q)	(Yermack, 1996).
Risk management committee size	RMCS	Number of RMC members at financial year end	(Malik et al., 2021)
Risk management committee diligence	RMCD	Number of RMC meetings during the financial year	(Kakanda et al., 2018)
Risk management committee expertise	RMCE	Proportion of RMC members with accounting, finance or related qualifications	(Boudiab & Ishaq, 2020)
Risk management committee independence	RMCI	Proportion of non-executive members on the RMC	(Yatim, 2009)
Overlap director	ODRC	1 if there is a member who serves on both the RMC and the AC and 0 for otherwise	(Tao, 2013)
Risk management committee diversity	RMCG	The number of female members on the RMC	(Malik, 2017)
Financial Leverage	FLEV	Total liability of the firm divided by the total asset	(Adenikinju & Ayorinde, 2001; Myers, 1977)

Source:

RESULTS AND DISCUSSION

Descriptive Analysis

Table 2: Descriptive Statistics (n=320)

Variable	Obs	Mean	Std. Dev.	Min	Max
MP	320	1.619	1.456	.124	9.287
RMCS	320	4.78	1.267	3	8
RMCD	320	3.111	.985	1	7
RMCE	320	.464	.197	.2	1
RMCI	320	.603	.144	.2	.81
OLVD	320	.69	.463	0	1
RMCG	320	.599	.606	0	2
FLEV	320	0.1407	0.1116	0.001	0.574

Note: MP= Market performance; RMCS = Risk management committee size; RMCD = Risk management committee diligence; RMCE = Risk management committee expertise; RMCI= Risk management committee independence; OLD = Overlap directors; RMCG = Risk management committee diversity; FLEV= Financial leverage.

Table 2 describes the characteristics of the data set, providing information regarding number of observations, standard deviation, mean, maximum and minimum values respectively. Market performance has maximum and minimum values of 9.2873 and .1241, a mean, and a standard deviation of 1.602389 and 1.431124, respectively. The average market performance over the course of this investigation was 16 percent, as shown by the mean value. The fluctuation of the firm market performance between the minimum and maximum value is represented by the standard deviation value of 1.431124. Because the standard deviation is less than the mean, the value of 1.602389 signifies a lower rate of deviation from the mean. While the market performance of some manufacturing firms is low, others witness steady growth in performance. RMCS has an average value of 4.778125 indicating that most manufacturing firms have an average of five directors as members of the RMC. The RMCD has a mean value of 3.115625 which implies that RMC held an average of three meetings in each financial year. RMCE has a mean value of .46225 which implies that only 46% of RMC members have accounting and finance knowledge. The RMCI has a mean value of .606 which implies that the composition of RMC in the manufacturing industry in Nigeria consists of significant members of non-executive directors. The overlap director has a Mean value of .6875, indicating that significant members of the RMC members serve on two or more board committees. Finally, the committee gender diversity has a mean value of .59375, indicating that there is a significant number of female members in the Risk management committees of manufacturing firms in Nigeria.

Correlation Analysis

Table 3. Pearson correlation matrix and multicollinearity test

	MP	RMCS	RMCD	RMCE	RMCI	OLD	RMCG	FLEV	VIF
MP	**1**	-0.2181	0.0471	0.0471	-0.1843	-0.3843	-0.0748	0.1418	1.39
RMCS		**1**	-0.1843	-0.1835	0.0404	0.1836	-0.0241	-0.1117	**1.22**
RMCD			**1**	-0.0398	-0.1515	-0.0640	-0.1182	0.0792	1.22
RMCE				**1**	0.0159	0.1667	-0.0544	-0.2639	**1.22**
RMCI					**1**	0.0399	-0.0110	-0.4254	**1.27**
OLD						**1**	-0.1284	0.0149	**1.14**
RMCG							**1**	-0.0041	**1.04**
FLEV								**1**	**1.39**
Mean VIF									**1.20**

Source: Authors' computation using STATA 14

Table 3 shows the Pearson correlation matrix and variance inflation factors of the dependent, independent and control variables of the manufacturing firms listed in Nigeria. The analysis measures the extent of relationship between the variables. A higher degree of relationship among the variables can result in a multicollinearity problem which will invalidate the basic econometric assumptions and validity of the findings of the study. RMC size, diligence, gender diversity and expertise are negatively correlated with market performance. While RMC independence and overlap directors maintain a positive correlation with market performance. Meanwhile, the control variable financial leverage is negatively correlated with market performance of listed manufacturing firms in Nigeria. The highest correlation in Table 3 is 0.1836 between OLD and RMC size. Furthermore, the variance inflation factor has a maximum value of 1.39. Thus, the data has no multicollinearity problems

Table 4: Panel corrected standard error analysis and diagnostic test

Source: Authors' computation using STATA14

Notes: MP= Market Performance; RMCS = Risk management committee size; RMCD = Risk management committee diligence; RMCE = Risk management committee expertise; RMCI= Risk management committee

Table 4 presents the panel corrected standard errors analysis and other diagnostic tests

Variables		**Model 1**			**Model 2**			**Model 3**	
	Coefficient	Z-value	P-value	Coefficient	Z-value	P-value	Coefficient	Z-value	P-value
RMCS	-.1490878	-5.33	0.000	-.1225893	-4.64	0.000	-.1225893	-4.64	0.000
RMCD	.0260232	0.35	0.724	.0160975	0.23	0.816	.9578922	7.94	0.000
RMCE	.744322	4.49	0.000	1.02635	4.76	0.000	-1.525387	-3.39	0.001
RMCI	-1.629138	-6.24	0.000	-1.130096	-2.76	0.000	1.551552	2.90	0.004
OLVD	-1.187373	-9.63	0.000	1.232732	-10.68	0.000	1.518141	9.97	0.000
RMCG	-.2847743	-3.28	0.001	-.2824905	-3.15	0.002	-.1364744	-1.82	0.068
FLEV				.0157312	1.80	0.072			
_cons	3.86227	12.43	0.000	3.143265	5.11	0.000	6.032896	4.94	0.000
No. of obs	320			320			320		
R squared	0.2228			0.2336			0.8590		
Wild chi2 (7)	333.24			399.76			3802.66		
Prob> chi2	0.0000			0.0000			0.0000		
Wooldridge test	79.766		0.0000						
Brush-Pegan / cook Weisberg	161.44		0.0000						
Shapiro-Wilk W		10.158	0.00000						

conducted (Auto correlation, Heteroscedasticity and Normality). The Wooldridge and Breush-Pagan/cook-Weisberg tests are signs indicating that the data set has auto correlation and Heteroscedasticity problems. Thus, the adoption of the panel corrected standard errors regression analysis which takes care of auto correlation and Heteroscedasticity problems. The Shapiro wiki test for normality is significant indicating that the data is normally distributed.

As presented in Table 4 risk management committee size is found to be negatively significant after the interaction with financial leverage (β= -.1225893, p<0.05). This result does not support the hypotheses which states that financial leverage has moderating effect on the relationship between RMC attributes and firm value. For RMC diligence after the interaction with financial leverage is found to have a positive significant impact on firm value (β= .9578922, p<0.05). The finding support the hypotheses, which states that financial leverage can moderate the relationship between RMC attributes and value of listed manufacturing firms in Nigeria. This is also in tandem with the postulate of the agency theory. For risk management committee expertise (RMCE), as presented table 4.10 is found to have negative significant impact on firm value after the interaction (β=-1.525387, p<0.05). The finding does not support the hypotheses, which stated financial leverage can moderate the relationship between RMC attributes and value of listed manufacturing firms in Nigeria. For risk management committee independence (RMCI), as presented in table 4.10 which found RMCI to have a positive significant impact on value of listed manufacturing firms after the interaction (β= 1.551552, p<0.05). The finding supported the hypotheses, which stated that financial leverage has a positive significant effect on the relationship between RMC attributes and value of listed manufacturing firms.

Impliedly the findings affirm that due to increase in monitoring activities by creditors of highly leverage firms, the short fall in discharge of committee responsibilities by non-executive directors is covered by the increased monitoring. Therefore, resulted in change in the strength and direction of relationship between RMCI and value after the interaction with financial leverage (moderator).For overlap directors on the risk committee (OVLD), as presented in table 4.10 which found a positive significant impact on firm value of listed manufacturing firms in Nigeria ($\beta = 1.518141$, $p<0.05$). The finding support the hypotheses, which states that financial leverage can moderate the relationship between RMC attributes and value. The finding also support the provisions of NCCG 2018, requiring firms having a separate risk committee to have two or more overlapped directors in the committee. Risk management committee gender diversity (RMCG), as presented in table 4.10 which found no change in direction after the interaction between the relationship of RMCG and value. RMCG has a negative insignificant impact on firm value even after the interaction ($\beta=-.1364744$, $p<0.05$). The finding failed to support the hypotheses, which stated that financial leverage can moderate the relationship between RMC attributes and market value of listed manufacturing firms in Nigeria.

CONCLUSION

This study aimed to investigate the risk management committee attributes and the value of listed manufacturing firms in Nigeria, while considering the moderating effect of financial leverage. The findings of this research shed light on several key points. Firstly, the study revealed that the establishment of a risk management committee positively influences the value of listed manufacturing firms in Nigeria. This highlights the importance of having a dedicated committee responsible for identifying, assessing, and managing risks within manufacturing organizations. Such a committee can enhance the overall value of firms by proactively addressing potential risks and implementing effective risk mitigation strategies. Secondly, the study found that financial leverage moderates the relationship between risk management committee attributes and firm value. This indicates that the impact of risk management committee attributes on market value is contingent upon the level of financial leverage. Higher financial leverage levels may amplify the influence of risk management committee attributes on firm value, emphasizing the need for careful consideration of leverage ratios in risk management practices.

Thirdly, the study emphasizes on the need for effective corporate governance best practices as it serves as catalyst for improve firm value. Thus, implies that good corporate governance structure and a risk committee are necessary condition for achieving better performance. Finally, this study contributes to the understanding of the role of risk management committee in enhancing market value within the manufacturing industry in Nigeria. By acknowledging the moderating effect of financial leverage, organizations can better align their risk management practices with their financial structures, ultimately leading to improved firm performance and resilience in the face of uncertainties

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INTERNAL CONTROL SYSTEM AND ORGANISATIONAL PRODUCTIVITY IN MANUFACTURING FIRM IN NIGERIA

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Abstract

This study examined internal control system on organizational productivity. the effect of inward review survey on authoritative materials assets, to decide the effect of interior review consistence measure on money related control of an organization and furthermore to find out if powerless inner control has effect on productive profitability. The investigation populace is Obajana Cement Company Plc while Taro Yamane testing system was utilized to decide the example size of two hundred and fifty (250). The poll was utilized to produce the information and the theories were tried utilizing Kolmogorov-Smirnov (K.S) Z test. The outcome demonstrates that interior review survey has critical effect on hierarchical operational system and inner review consistence measure has huge effect on the returned related control on the system. The examination suggests that the head of inside review unit must guarantee hierarchical operational system must be screen from the purpose of procurement to the store, to the creation unit and to deals unit for ideal authoritative productivities. The head of interior review unit ought to guarantee one officer ought not begin and finish exchanges from the earliest starting point to the end. There must be double or numerous approvals to improve governing rules in the structures.

INTRODUCTION

Internal control has proof of being an indispensable tool in improving productivity in an organization including profit-oriented institutions. Internal control is an independent appraisal of the functions and qualities of performance of an organization as a basis structure and compliance towards the organizational policies. According to Andrew (2021), internal control is an element of the internal control system set up by the management of an enterprise to examine, evaluate and report on accounting and other controls in operation. It exists either voluntarily or in certain circumstances because of statutory requirements. There are no precise functions for internal controllers since they do not have any statutory responsibilities.

Aguolu (2020) stated that the functions of an internal controller are specified by the management who appointed him where this exists. Specific responsibilities of the internal control department do not depend on the entity's size, structure and management requirement. These include reviewing the procedures and risk assessment made available to management for decision making; a continuous review of the system of internal control within the organization for adequate report and recommendation to the management on any required amendments. It equally carries out a review of the transaction of the organization for compliance with the established procedure; carrying out special investigation on the specific aspect of the business as may be directed by the management and providing technical support to management for the establishment, implementation and improvement in the system of internal control.

The expanding business disappointments and broadly pitched extortion exercises have influenced elements to put more accentuation on their inner control frameworks and inward review capacities. Low profitability in organization can be followed to abnormalities in the organization inward control framework which can prompt disappointment of the organization. The organizations that need utilitarian inner review unit frequently have issues related with the budgetary proclamations. Proof from over the globe affirms that the defilement in monetary administrations have lopsidedly blocks financial improvement, lessens social administrations, and redirects interests in framework, organizations and social administrations.

Absence of utilitarian's inside review division expands dangers and expenses to business, harms financial specialist's certainty, and retard organization development, goes about as a solid obstacle to organization operational execution and hose speculators' trust in the organization. Regardless of, the way that inner review unit exist in many organizations with inside control framework set up, However, the demonstration of abnormalities still holds on in the territories of monetary, procedural and even ruptures of different controls in the organization. This required the present investigation to evaluate the effect of inward inspecting in enhancing the efficiency of Obajana Cement Company Plc.

LITERATURE REVIEW

Concept of Internal control

No doubt that Internal control (IC) functions are responding to new challenges, changes and expectations. They are highly motivated to provide greater value and be regarded as a key element of their organizations' corporate governance framework. The result is that IC has emerged as an independent, objective assurance and consulting activity designed to add value and improve operations in an organization. Tamer and Sezer (2021) asserted that effective IC functions facilitate financial and operational services of companies to achieve key business objectives by bringing a systematic, disciplined approach to evaluating and improving the effectiveness of corporate governance, risk management and internal control processes.

The Research Foundation of the Institute of Internal controllers (IIC) has developed a new definition of internal control; this new definition was accepted by the IIC's Board of Directors in July 2017. Internal control is defined as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations processes. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (IIC, 2017). The objective of internal controling is to assist members of the organization in the effective discharge of their responsibilities. Internal control is an independent operational function in an organization, it examines and evaluates complICnce some organization activities, and provides services to the organization. It is a kind of management control and works through measuring and evaluating the effectiveness of other controls or department.

The objectives of internal control are appropriate control; the reliability of information system; assets protection; and efficient use of resources (McAvoy, 1977). Thus, an internal control system cannot function well without internal auditor for post audit. The statement of responsibilities of the internal control refers to internal control as an independent operational activity within an organization for the review of operations as a service to staff compliance. It is a management control which functions by measuring and evaluating the effectiveness of the control. Adekunle (2021) stated that internal control is a service to reassure management that its arrangement for control is satisfactory. Millichamp (2000) defined internal control as an independent appraisal function established by the management of an organization for the review of systems of control and the quality of performance as a service to the organization. It objectively examines operational policies and compliance on the adequacy of internal contribution to the proper economic, efficient and effective use of resources.

In an attempt to provide a substantial meaning to the term internal control Chambers (2021) states that internal control is the process of appraising the information flow to the monitoring function of a system for its equality and completeness. It is carried out by checking that information and by the irregular generation of test information flows. Mbah (2000) states that “internal control is a review of operations and records, sometimes continuous undertaking within a business by specially assigned Staff.

Internal control System in the Organization

Internal control should not be restricted to financial transaction only. Thompson (2013) opined that internal control can equally assist management by ensuring that adequate financial and management controls have been implemented and are operating effectively or by identifying the weaknesses in such system and making recommendations toward their improvement which include internal control, errors are more likely to be discovered in their early stages. Existence of assets is verified so as to protect the assets of the organisation, errors in account can be corrected early once detected by the internal control, it acts as moral influence on the staff and promotes efficiency by compelling the officers to keep their books of account entered up to date, a detailed examination of the financial account submitted by contractors is facilitated, cash disbursement, such as for wages and salaries, may be checked before they are cashed.

The responsibility for ensuring that internal control is established in the organisation lies with management. The internal control is supposed to be the custodian of internal control by providing assurance to the management that the organisation has put in place adequate and effective internal control system, and must not hesitate to draw management’s attention to lapses observed in the control. Oshisami (2013) sees internal control system as the managerial functions of defining and allocating responsibilities and identifying line of reporting that encompass all aspects of operations for the attainment of corporate objectives of an organisation. The System of Auditing of the American Institute of Certified Accountants, as cited in Daniel (1999) defines internal control system as the plan of organisation and all of the coordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, promote operational efficiency, and encourage adherence to prescribed managerial policies. The adherence to prescribed managerial policies in order to promote operational efficiency.

The above definition of internal control brings out, in clear terms that the internal control extends beyond financial and accounting matters, on the custody of the organisation's assets. In its broad sense, it includes all the controls operated by an organisation to facilitate its activities and improve its efficiency and productivity. It also includes all administrative controls designed to effect, supervise and check management policies and strategies within an organisation such as organisation and method, work study, production control, marketing, selling and distribution, financial and accounting control.

Internal control System and Organizational Performance
Internal control system is expected to help organizations achieve objectives (Monday, 2011). According to the Institute of Internal controls (1991), the internal control unit is expected to review the means of safeguarding assets and where appropriate, verify the existence of such assets. Financial control has concentrated on the cash out flow, purchasing procedures and accountability of budget holders for current expenditure on resources inputs (Mainoma, 2007) and (Buhari, 2001). Internal control cannot be regarded as having completed its role unless its findings and recommendations are implemented (Sawyer, 1995). Therefore, management action on IC recommendations is considered vital for internal control 's contribution to organizational performance (Raghunandan & Mchugh, 1994).

Consequently, management support for IC is considered essential to enhance IC's role in organizational goal attainment (Rittenberg & Covaleski, 2001). Thus, the following proposition is worth pursuing. Management's action on internal control recommendations enhances the positive contribution of effective internal control to organizational goal achievement. Internal audit makes a large contribution to the achievement of company goals, and the implementation of strategies for their achievement (Ljubisavljević & Jovanovi, 2011). In addition, the internal control function is responsible for reinforcing management and audit committee (Hutchinson & Zain, 2011). Likewise, internal control determines the reliability, reality, and integrity of financial and operational information that comes from different organizational units, on which appropriate business decisions at all levels of management are based. Successful implementation of internal control tasks means that it must be independent, i.e., company management should in no way influenced by its work, information, conclusions, and evaluations. In this way the internal control report becomes a means of communication between internal control and management, and an important guideline for the successful management of the company (Ljubisavljević & Jovanovi, 2015).

Furthermore, the internal control function facilitates the operation and effective working of the audit committee as the audit function goals are consistent with the former's financial reporting oversight responsibilities (Goodwin & Yeo, 2001; Goodwin, 2003; Scarbrough, Rama & Raghunandan, 1998). The creation of an internal control function is supported by the governance reports (NYSE, 2002) and previous studies (Collier & Gregory 1996; Goodwin & Kent, 2003) as a mechanism to enhance internal governance processes.

Internal control system and Financial Performance of Organization

Most internal control professionals argue that an effective internal control function correlates with improved financial performance. According to Bou-Raad (2000), an effective internal control service can, in particular, help reduce overhead, identify ways to improve efficiency and maximize exposure to possible losses from inadequately safeguarded company assets all of which can have a significant effect on the financial performance of an organisation. He also stated that internal control is an invaluable tool of management for improving performance. Internal control help run a company more efficiently and effectively to increase shareholders value. Chun (1997) argued that the existence of an effective internal control function is oganization with superior organizational performance. At the empirical level, a survey conducted by KPMG (2003) found that the internal control function in organizations where it exists, contributes substantially to performance improvement and assist in identifying profit evidence in corporate disasters, particularly financial fraud consistently documents an oranization between weak governance. Thus, internal control by acting as a watchdog could save the organization from malpractices and irregularities thus enabling the organization to achieve its objectives of ensuring high level of productivity and profit.

Empirical Review

Aaron and Gabriel (2010) examined the effectiveness of internal controling: an empirical examination of its determinants in Israeli organizations. They used one hundred and eight Israeli organisations employ IC participated in the study (a 37% response rate). Data on the effectiveness of IC were collected from the organisations' general managers and data on the determinants from their internal controls. The findings reveal good psychometric properties for the scale developed in this study. The correlation and regression analyses show support from top management to be the main determinant of IC effectiveness, with some effect also found for the organizational independence of IC.

Dien (2014) assesses the impact of internal control function effectiveness on quality of financial reporting aod its implications on good government governance research on local government Indonesia. The research conducted on 70 working unit area device on 7 District Local Government in eks Karesidenan Pekalongan Indones IC uses survey methods. The data is primary data collected. Hence and Asairy (2009) evaluated the effectiveness of internal control in Saudi joint stock companies. The researcher used a questionnaire, which he sent to the directors of internal control departments, senior company management and external auditors from 38 companies. The author argued that internal control was affected by the support they received by the external auditors. Regarding the effectiveness of internal control, Asairy stated that education, training, experience and professional qualifications of internal control influenced the effectiveness of internal control.

through questionnaire. The samples selection uses proportionate stratified random sampling method. The data was processed using structural equation modeling (Part ICl Least Square). The results of this research show that: (1) From the results of test Krusskal Wallis, there are no significant differences between the effectiveness of the internal control, quality financial reporting and the good government governance in 7 local government (2) the effectiveness of the internal control function has significant effect on the quality of financial reporting. 3)

Internal control function has significant effect on Good Government Governance Application, 4) Quality of financial reporting has significant effect on Good Government Governance Application

Theoretical Framework

The study is linked with agency-theory, agency theory is associated with the conflicting interests of shareholders and management of a company, suggesting that the less-informed party (shareholders) will have a demand for information that monitors the behavior of the better-informed manager. Thus, internal control Cl reports would be one form of such information, providing the shareholders with independent assurance about the ongoing developments.

Wallace (1980) identified three hypotheses to explain the demand for internal control: the stewardship hypothesis, the information hypothesis and the assurance hypothesis. The stewardship hypothesis is best explained by the use of the agency theory. The theory describes the relationship between the management of a company (agent) and its shareholders (principals). It is assumed that the agent has a considerable advantage over the principal, for he possesses more information about the value of the company. This is also known as information-asymmetry and may lead to conflicts of interest between the shareholders and managers. In order for the principals to be able to rely on the information given by the management there is an incentive for both managers and outside investors to engage reputable auditors (Hayes et al., 2005). The audit function adds to the credibility of information, for users can have more confidence in the information, which assists them in their decisions.

METHODOLOGY

The study adopted survey research, which aim at collecting data from the population for intensive study and analysis. The population of this study is the staff of Obajana Cement PLC. The staff strength of the company as at June, 2024 is 3, 500, both senior and junior staff members. The total sample of 250 Staff was the sample size used for this study using Taro Yamani. The primary data was used which was made to carry out a sample survey of the effects of internal control system in improving the productivity in Obajana Cement PLC. The descriptive statistics was used while the respondents' responses were interpreted using mean score of rating using Statistical Package for Social Sciences (SPSS version 21.0) was used to analyse the data while all the Null hypotheses were tested using Kolmogorov Smirnov (K.S) Z test.

RESULTS AND DISCUSSION

This section deals with the analysis and presentation of data which will be geared to words examine the effect of internal control system on organizational productivity in Obajana Cement Company. Simple percentage are presented to depict feedback of the questionnaire administered.

Question 1: To what extent do you agree that internal control system has effect on organizational operation.

Responses	Frequency	Percentage
Strongly Agreed	115	42
Agreed	85	34.4
Disagreed	30	13.5
Strongly Disagreed	20	9.2
Total	250	100

Source: Field survey, 2024

The above shows that 115 respondents representing 42% strongly agreed that internal control system has an effect on organizational operation, 85 respondents, representing 34.4% agreed and 30 respondents, representing 13.5% disagreed and 20 respondents representing 9.2% strongly disagreed.

Question 2: To what extent do you agree that weak internal control system has effect on productivity of an organisation.

Responses	Frequency	Percentage
Strongly Agreed	125	52
Agreed	70	24.4
Disagreed	35	13.5
Strongly Disagreed	15	9.2
Total	250	100

Source: Field survey, 2024

The above shows that 125 respondents representing 52% strongly agreed weak internal control system has effect on productivity of an organization, 70 respondents, representing 44.4% agreed and 35 respondents, representing 13.5% disagreed and 15 respondents representing 9.2% strongly disagreed.

Statement of Hypotheses

H_{01}: Internal control system has no significant effect on organizational operation.

H_{02}: Weak internal control system has no significant effect on organizational productivity

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Question_1	250	1.00	4.00	3.3171	.59607	2.572	.240
Question_2	250	1.00	4.00	3.1514	.60013	2.481	.240
Valid N (listwise)	250						

Source: Researcher's computation using SPSS version 20.0

The mean score of 3.4171 of question 1 in above indicated that Internal control system has a significant effect on organizational operation. The coefficient of kurtosis of 2.572 implies that the data did not follow the normal distribution assumption. The mean score of 3.1514 of question 2 in the table equally shows that internal control ensures that raw materials are supplied accurately by the suppliers to the store unit in the organisation. The coefficient of kurtosis of 2.481 implies that the data did not follow the normal distribution assumption.

Discussion of Findings

The study revealed that internal control system has significant effect on organizational operation. This implies that internal control ensures that raw materials requisitions are place at the right time and in the right quantity and raw materials are supplied accurately by the suppliers to the store unit in the organisation. Internal control ensures that raw materials are supplied accurately from the store to the production section and finished goods are available at the right quantities in the sales unit of the organisation. This finding is in agreement with the the finding of Momoh (2015) who stated that internal control ensures that all financial transactions are in accordance with the approved regulations and that adequate system of security exists in the establishment. The study finally revealed that weak internal control system has significant effect on organizational productivity. This implies that weak materials control, weak financial control, weak production control and weak sales control account for low output in the organisation. This finding is in agreement with Mary (2022) who opined that internal control system is very weak toward financial and other controls in orgnisation. However, this finding is in disagreement with Sunday M. (2015) who asserted that internal control provides all administrative controls designed to effect, supervise and check management policies and strategies within an organisation such as organisation and method, work fstudy, production control, marketing, selling and distribution, financial and accounting control.

CONCLUSION AND RECOMMENDATIONS

Conclusion

It is pertinent to say that the importance of internal control system in an organization can never be over emphasized. The internal control unit must follow up materials movement from time to time to ensure that raw materials requisitions are place at the right time and in the right quantity. The raw materials should be supplied accurately by the suppliers to the store unit, raw materials should be supplied accurately from the store to the production section, and finished goods must be available at the right quantities in the sales unit of the organisation for optimum productivities. The internal control unit and the management should work hand in hand to ensure that effective and efficient internal control system is put in place because weak internal control causes low productivity in an organization. Effective control mechanism should be put in place in respect of materials control, financial control, production control and sales control for optimum organizational productivities.

Recommendations

(i) The head of internal control unit must ensure organizational operation must be monitor from the point of purchase to the store, to the production unit and to sales unit for optimum organizational productivities

(ii) The management should install and maintain effective and efficient internal control system in the organization.

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IMPACT OF CORPORATE GOVERNANCE MECHANISMS ON ACCOUNTING CONSERVATISM OF LISTED MANUFACTURING COMPANIES IN NIGERIA

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Abstract
This study examined the effect corporate governance mechanisms on accounting conservatism of listed manufacturing companies in Nigeria. The study which was used sample of 32 firms from the population listed manufacturing firms in Nigerian Exchange Group and covered the period 2013to 2022. Three models were formulated for the study and the data collected were presented and analyzed under descriptive statistics, correlational analysis and regression analysis. The study found that board size and managerial ownership have significant effect on accounting conservatism in Model 2 while only managerial ownership extert significant effect on accounting conservatism in Model 3. Based on these findings the study recommended amongst others that companies should consider conducting regular reviews of their board composition to ensure an optimal mix of independent and non-independent directors. Also, companies should tailor board size to fit organizational needs and industry standards. Given the divergent findings for managerial ownership, the study companies should carefully consider their ownership structures by considering implementing policies that encourage managerial ownership.

Key Words: Corporate Governance, Accounting Conservatism, Board Independence, Board Size, Board Diligence, Managerial Ownership.

INTRODUCTION

Financial scandals in Nigeria, involving companies such as Oceanic Bank, Societe Generale Bank, Savannah Bank, and Cadbury Plc, were shocking and highlighted the significant influence of managers' estimates, and by extension, accounting conservatism, on the quality of financial reporting (Ukpong et al., 2023). Just like the global cases of Xerox, Tyco, HIH insurance, Enron, Arthur Andersen, and WorldCom, these Nigerian corporate scandals and failures were rooted in a failure of managers to accurately represent the financial health of their organizations in their reports (Emmanuel & Salisu, 2018). CEOs and Managers of these failed companies were discovered to have engaged in earnings manipulation through transaction structuring and overly optimistic estimates, which had a detrimental impact on earnings and financial reporting in Nigeria.

According to Kempthorne and Terrizzi (2021), accounting conservatism is a guiding principle characterized by the anticipation of potential losses and the abstention from recognizing profits unless certain; it constitutes a crucial yet multifaceted aspect within the framework of Generally Accepted Accounting Principles (GAAP). Haider et al. (2021) underscore conservatism as an accounting practice that necessitates a higher level of confirmation for positive developments, such as earnings, in comparison to negative occurrences, such as losses. Critics however, contend that accounting conservatism introduces a bias into financial statements, thereby constraining its effectiveness as a tool for evaluating corporate risk (Hansen et al., 2018).

Corporate governance, encompassing regulations and mechanisms, plays a pivotal role in ensuring that firms operate ethically, efficiently, and in the best interests of their stakeholders (Chiedu et al., 2022). Within the broader context of the study, corporate governance emerges as a critical backdrop against which accounting conservatism operates. The Nigerian manufacturing sector, being a significant contributor to economic growth, necessitates a close examination of corporate governance's effectiveness.

Recent literature emphasizes the importance of corporate governance in shaping financial reporting practices, particularly the concept of accounting conservatism (Chiedu et al., 2022; Musa & Temitope, 2023; Aburishe et al., 2022). Accounting conservatism reflects the prudence and caution exercised by firms in their financial reporting, which may lead to the timely recognition of losses and a more transparent portrayal of financial health. This study explored how various corporate governance mechanisms influence accounting conservatism in listed manufacturing firms in Nigeria.

The relationship between corporate governance and accounting conservatism is an intricate one. While larger boards may offer diverse perspectives and increase oversight, potentially promoting conservative accounting practices, the relationship between board size and accounting conservatism warrants empirical investigation due to potential challenges in decision-making and coordination. Similarly, gender diversity and board diligence are expected to influence the adoption of conservative accounting practices, as they bring varied viewpoints and experiences to boardroom discussions, contributing to rigorous oversight and decision-making processes.

Likewise, managerial ownership reflects the extent to which managers or executives hold shares in the company. Higher managerial ownership may align the interests of managers with those of shareholders, potentially leading to a preference for conservative accounting practices to protect shareholder value. However, excessive managerial ownership could also lead to managerial entrenchment and a reluctance to adopt conservative accounting policies.

Statement of the Problem

The manufacturing sector is a vital component of the Nigerian economy, making its sustained growth and increased investment crucial. Consequently, ensuring the transparency and dependability of financial reporting within this sector becomes a matter of paramount significance (Abuaja, 2023). Accounting conservatism is a key aspect of financial reporting that has gained increasing attention in recent years. The use of conservative accounting practices, which involves recognizing losses promptly while being cautious about recognizing gains, is believed to provide a more accurate and reliable representation of a firm's financial health (Ukpong et al., 2023).

However, there is a concern that in Nigeria, some manufacturing firms may not employ adequate accounting conservatism, which could potentially lead to aggressive financial reporting practices (Ugbah, 2020). This problem is exacerbated by weaknesses or variations in corporate governance mechanisms within these firms, including the composition and independence of their boards, the effectiveness of audit committees, and the protection of shareholder rights (Ukpong et al., 2023).

Empirical evidence has consistently demonstrated a direct correlation between corporate governance mechanisms and the adoption of conservative accounting policies (Abbas & Mohammedreza, 2015; Ahmed & Henry, 2012; Artiach & Clarkson, 2013; Callen et al., 2014; Caskey & Laux, 2017; Leventis et al., 2013). Nevertheless, a limitation observed in the aforementioned studies is their reliance on single measures of accounting conservatism. This study departs from the norm by embracing a multi-faceted approach using Market-Based measurement for accounting conservatism (Beaver & Ryan, 2005), Negative Accrual-Based measurement (Givoly & Hyan, 2007) and Hidden Reserve based measurement (Penman & Zhang, 2002) which enhances the study's robustness and provides deeper insights into the realm of accounting conservatism. The multi-faceted approach is preferred for its ability to offer a more comprehensive, less biased, and robust exploration of accounting conservatism. It addresses the limitations associated with a single measurement approach and provides a more intricate perspective that aligns with the multifaceted nature of accounting practices.

Despite the significance of these two focal areas (accounting conservatism & corporate governance) and their well-established advantages, coupled with a wealth of international literature, there exists a noticeable dearth of research especially in the context of the Nigerian manufacturing sector.

This study bridged significant gaps in the existing literature by investigating the interplay between corporate governance and accounting conservatism in the Nigerian manufacturing sector. The research departs from the conventional reliance on single measures of accounting conservatism by adopting a multi-faceted approach, incorporating Market-Based measurement, Negative Accrual-Based measurement, and Hidden Reserve-based measurement. This departure enhances the study's robustness and provides a more nuanced understanding of the complex relationship between corporate governance mechanisms and conservative accounting policies. Furthermore, the study addresses the dearth of research within the Nigerian manufacturing sector.

Objectives of the Study

The paper aims to investigate how corporate governance mechanisms influence accounting conservatism in listed manufacturing firms in Nigeria. Specifically, it examines the impact of board independence, board size, board gender diversity, board diligence, and managerial ownership on accounting conservatism within this context.

Research Hypotheses

To achieve the stated objectives of the study, the following hypotheses were formulated and tested:

H_{01}: Board independence does not have significant impact on accounting conservatism of listed manufacturing companies in Nigeria.

H_{02}: Board size does not have significant effect on accounting conservatism of listed manufacturing companies in Nigeria.

H_{03}: Board gender diversity does not have significant impact on accounting conservatism of listed manufacturing companies in Nigeria.

H_{04}: Board diligence does not have significant effect on accounting conservatism of listed manufacturing companies in Nigeria.

H_{05}: Managerial ownership does not have significant effect on accounting conservatism of listed manufacturing companies in Nigeria.

LITERATURE REVIEW

Conceptual Review

Corporate Governance

The term corporate governance has become a topic that has been researched increasingly in the last decade (Ukpong et al., 2023). Corporate governance has no single accepted definition, this is often attributed to the huge differences in countries corporate governance codes. The definition varies based on the framework and cultural situation of the country under consideration (Asiriuwa et al., 2019). Also, the differences in definition can be as a result of the different viewpoint from the different perspectives of the policy-maker, researcher, practitioner, or theorist (Solomon, 2010). The term corporate governance came into use in the 1980s to broadly describe the general principles by which businesses and management of companies were directed and controlled (Dor, 2011).

Corporate governance is the process by which the business activities of an institution are directed and managed (Central Bank of Nigeria, 2013). Adebsi et al. (2013) posited that corporate governance is a set of rules and incentives through which the management of an organization is being directed and controlled. They emphasized that corporate governance consists of body of rules of the game by which companies are managed. The whole essence of corporate governance is to ensure that the business is run well and investors receive a fair return. A firm is said to have observed corporate governance rule if the firm is managed with diligence, transparency, responsibility and accountability aimed at maximizing shareholders' wealth.

The aim of corporate governance is to ensure that corporations are managed in the best interests of their owners and shareholders (Alves, 2020). This applies specifically to listed companies where the majority of the shareholders are not in participation every day. Another essence of corporate governance is establishing transparency and accountability throughout the organization. This is feasible as corporate governance system is premised on a strict division of power and responsibilities between the shareholders through the annual general meeting, the board of directors, the executive management and the auditors.

Accounting Conservatism

Watts and Zimmerman (1986), as cited in Ukpong et al. (2023), defined accounting conservatism as the principle that requires accountants to report the highest alternative value for liabilities and the lowest alternative value for assets. Additionally, costs should be recorded sooner rather than later, and revenue should be recorded later rather than earlier. According to this definition, financial reporting is inclusive and includes conservatism as a characteristic. Accounting conservatism can be defined as accountant's tendency to require a higher degree of verification for recognizing good news than bad news in financial statements (Basu 1997, cited in Abuaja, 2023).

According to Chiedu et al. (2020), accounting conservatism is defined as 'anticipate no profit, but anticipate all losses. However, accounting conservatism in this extreme form has been traded in for a less severe form. Nowadays, accounting conservatism is viewed as an asymmetry in the level of verification needed to recognize gains and assets on the one hand and losses and liabilities on the other. To recognize gains or assets a higher level of verification is required relative to the recognition of expenses or liabilities (Chiedu et al., 2020).

The goal of accounting conservatism, according to Haixin and Kyunbeom (2022), is to make sure that costs are recognized as soon as possible and that revenues are only recognized after all necessary conditions have been satisfied. Conservative accounting information can be one of the corporate governance structures that complement the information asymmetry that exists between corporate managers and shareholders (Haixin & Kyunbeom, 2022).

Theoretical Framework

There are several theories which attempted to clarify the demand for accounting conservatism. These theories examine different sources of the demand for accounting conservatism and explain the rise of conservatism in financial statements.

Agency Theory

The agency theory is credited to Jensen and Meckling, (1976) who noted that agency is a contract entered into by persons known as the principal and the agent, upon which the agent carries out activities on behalf of the principal who delegated some decision-making authority to the agent. This theory stipulates that the principals (shareholders) are the owners of the firm while agents, otherwise known as managers or appointed directors, are delegated authorities to run the activities of the firm (Clarke, 2004). The agency theory states that rational agents (managers) will act in their own interest, not their shareholders' interests because of separation of ownership from control (Jensen & Meckling, 1976). However, Habbash, (2010) posited that in modern corporations, the shareholders (principals) were widely dispersed, and they were not normally involved in the day-to-day operations and management of their companies hence, they hire managers (agent) to manage the corporation on their behalf.

The agency theory lens suggests that effective corporate governance mechanisms act as safeguards against managerial opportunism. For instance, a board with a higher level of independence may enhance monitoring and oversight, reducing the likelihood of managers making decisions solely for their benefit. Similarly, the inclusion of gender-diverse members and diligent board practices can contribute to a more balanced decision-making process. Managerial ownership, as an aspect of the agency theory, is also examined, acknowledging that while it aligns the interests of managers with shareholders, it may introduce conflicts if managers prioritize personal gains over the firm's well-being.

Signaling Theory

Signaling theory was propounded by Michael Spence (1973) and is fundamentally concerned with addressing information asymmetry between two parties. Spence's seminal contribution illustrated how individuals could use costly signals, such as rigorous higher education, to convey their quality to potential employers. The idea is that by engaging in certain behaviors or investments, individuals can reduce uncertainty and convey credible information to others. This theory has been widely applied in various disciplines, emphasizing its versatility in explaining behavior when parties possess different information.

In the context of this study, signaling theory will be instrumental in understanding the communication dynamics between managers and shareholders. Corporate governance mechanisms can be viewed as signals that firms use to convey information about their commitment to transparency, accountability, and the protection of shareholder interests. The key proponent of signaling theory, Michael Spence, argued that individuals or organizations faced with information asymmetry must choose how to communicate information, and recipients must decide how to interpret those signals.

The two main theoretical frameworks underpin this research are agency theory and signaling theory. Agency theory posits that managers (agents) may act in their own interests, and strong corporate governance (e.g., independent board) mitigates this risk. While signaling theory suggests that firms use governance mechanisms to signal their commitment to transparency and shareholder value, potentially impacting accounting conservatism practices.

Empirical Review

Emmanuel and Salisu (2021) analyzed corporate governance's impact on accounting conservatism in Nigerian food and beverage firms using ex-post facto design and panel data (2012-2016). They found that board independence positively affects accounting conservatism and recommended increasing non-executive directors and maintaining a small board size. Ukpong et al (2023) also show positive linkage between the two variables.

Saeed (2020) studied the link between corporate governance and accounting conservatism in 300 firms from Bangladesh, India, and Pakistan (2009-2015) using panel data. The study found that board size does not significantly impact accounting conservatism in Bangladesh.

Musa and Temitope (2023) examined corporate governance's effect on accounting conservatism in 14 Nigerian food and beverage firms (2012-2021) using ex-post facto design and purposive sampling. They found no significant impact of gender composition on accounting conservatism and recommended attention to corporate governance policies.

Abuaja (2023) investigated board gender diversity and diligence's effect on accounting conservatism in 57 listed Nigerian manufacturing firms (2007-2021) using ex-post facto design and linear regression. The study found board diligence significantly affects accounting conservatism and recommended promoting frequent board meeting attendance. Nguyen et al. (2023) who also investigated whether board diversity affect the accounting conservatism, reported positive connection between the two variables.

Chiedu et al. (2022) explored ownership structure's impact on accounting conservatism in 75 non-financial Nigerian firms (2010-2019) using ex-post facto design and panel regression. They found ownership structure significantly affects accounting conservatism, with notable impacts from managerial and foreign ownership. Similar results were reported in Asiriuwa et al. (2019) and Alves (2020).

METHODOLOGY

This study employed an ex-post facto and panel longitudinal design, analyzing data from 32 firms over 10 years (2013-2022) to explore how past governance structures influence accounting conservatism. From population comprised 58 manufacturing companies listed on the Nigerian Exchange Group, sample of 32 was scientifically selected for the study. Data of the study which were collected from audited annual reports were analyzed using descriptive statistics, correlation analysis, and regression techniques. Regression analysis, involving fixed and random effects models, was conducted based on the Hausman Specification Test. Pre and post-estimation tests, including normality, multicollinearity, autocorrelation, and heteroscedasticity tests, ensured the robustness of the regression models.

Model Specification
The study adopts a multi-model regression approach as expressed below:
Model 1:
$MTB_{it} = \beta_0 + \beta_1 BIND_{it} + \beta_2 BSIZE_{it} + \beta_3 BGD_{it} + \beta_4 BDIL_{it} + \beta_5 MOW_{it} \beta_6 FSIZE_{it} + \beta_7 LEV_{it} + \beta_8 ROA_{it} + e_{it}$
Model 2:
$ACCR_{it} = \beta_0 + \beta_1 BIND_{it} + \beta_2 BSIZE_{it} + \beta_3 BGD_{it} + \beta_4 BDIL_{it} + \beta_5 MOW_{it} \beta_6 FSIZE_{it} + \beta_7 LEV_{it} + \beta_8 ROA_{it} + e_{it}$
Model 3:
$HDR_{it} = \beta_0 + \beta_1 BIND_{it} + \beta_2 BSIZE_{it} + \beta_3 BGD_{it} + \beta_4 BDIL_{it} + \beta_5 MOW_{it} \beta_6 FSIZE_{it} + \beta_7 LEV_{it} + \beta_8 ROA_{it} + e_{it}$
Where:
MTB = Market-to-Book ratio
ACCR = Negative Accruals Based Conservatism
HDR = Hidden Reserve Based Conservatism
BIND = Board Independence
BSIZE = Board Size
BGD = Board Gender Diversity
BDIL = Board Diligence
MOW = Managerial Ownership
FSIZE = Firm Size
LEV = Leverage
ROA = Return on Assets (Profitability)
β_0 = Intercept
$\beta 1 - \beta 8$ = Coefficients of independent and control variables
ε = error term
i = Number of firms in the data (i.e 51)
t = Time period of the data (10 years)

The description and measurement of variables of the study are summarized in Table 1.

Table 1: Variables and their Measurement

Variable Name	Variable Type	Acronym	Measurement	Source
Market- to - Book ratio	Dependent	MTB	Equity Book Value / Closing Price x Volume of Shares	Beaver & Ryan (2005); Adyunita et al. (2021)
Negative Accruals Based Conservatism (ACCR)	Dependent	ACCR	Income before extraordinary items PLUS Depreciation expense MINUS Cash flow from operating activity divide by Total assets	Givoly and Hayn (2000); Chiedu et al, 2022
Hidden Reserve Based Accounting	Dependent	HDR	Estimated reserves / Net Operating Assets	Penman & Zhang (2002)

Conservatism				
Board Independence	Independent	BIND	Proportion of non-executive directors to the total number of directors on the board	Emmanuel & Salisu (2018);
Board Size	Independent	BSIZE	Total Number of directors on the board in a particular year	Salehi et al. (2012)
Board Gender Diversity	Independent	BGD	Proportion of women on the Board	Aigbedo (2020), Kyere & Ausloos (2020).
Board Diligence	Independent	BCOM	Number of board meetings held in an accounting year.	(Lei, 2012) Osazevbaru (2020)
Managerial Ownership	Independent	MOWN	% shareholding of executive directors	Chiedu et al. (2020) and Zulfikar et al. (2020).
Firm Size	Control	FSIZE	Natural Log of Total Assets	Abiahu & Amahalu (2015);
Leverage	Control	LEV	The ratio of Total debt / Total assets	Emmanuel & Salisu (2018);
Profitability	Control	ROA	$\frac{\text{Profit Before Tax}}{\text{Total Assets}}$	Ukpong et al. (2023)

Source: Researcher's Compilation, 2023

RESULTS AND DISCUSSIONS

Descriptive Statistics

The descriptive statistics in Table 2 offer a comprehensive overview of the key variables that contribute to the understanding of this study.

Table 2: Descriptive Statistics (N = 320)

Variable	Min	Max	Mean	Std. Dev
MTB	-8876.44	66503.09	1785.16	9234.57
ACCR	-1.20	5.18	1.72	6.26
HDR	-7.37	6.31	0.68	1.08
BIND	0	0.93	0.67	0.26
BSIZE	0	18.00	9.68	3.45
BGD	0	0.67	0.20	0.13
BDIL	0	10.00	4.53	1.46
MOWN	0	0.88	0.46	0.24
LEV	-0.53	5887.70	73.89	654.42
ROA	-0.32	1.64	0.05	0.15
FSIZE	0	28.38	22.08	6.99

Source: Author's Computation using STATA (2024)

From Table 2, the Market-to-Book ratio (MTB) has a mean of 1,785, indicating that on average, the market value of firms greatly more than the book value. The wide range of market-to-book values among firms is shown by the minimum and maximum values of -8876.44 and 66503.09, respectively, with a standard deviation of 9234.57. Negative Accruals (ACCR) have a mean of 1.72, reflecting a conservative accounting approach with a wide range of values from -1.20 to 5.18 and a standard deviation of 6.26. Hidden Reserve (HDR) has a mean of 0.68, indicating an average hidden reserve ratio of 68%, with values ranging from -7.37 to 6.31 and a standard deviation of 1.08. Board Independence (BIND) averages 67% of non-executive directors, with a range of 0 to 0.93 and a standard deviation of 0.26. Board Size (BSIZE) averages 10 members, and a standard deviation of 3.449359. Board Gender Diversity (BGD) averages 20% women, and a standard deviation of 0.13. Board Diligence (BDIL) averages about 4 to 5 meetings per year, with values from 0 to 10 and a standard deviation of 1.46. Managerial Ownership (MOWN) averages 46%, and a standard deviation of 0.24.

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Correlation Analysis

Correlation analysis provides insights into the relationships between the variables used in the study. The sign of the correlation coefficient explains the direction of the relationship, while the absolute value indicates the strength of the correlation.

Table 3: Correlation Matrix .

	MTB	ACCR	HDR	BIND	BSIZE	BGD	BDIL	MOW	LEV	ROA	FSIZE
MTB	1.000										
ACCR	-0.032	1.000									
HDR	0.084	0.048	1.000								
BIND	-0.057	0.080	0.123	1.000							
BSIZE	-0.027	0.230	0.061	0.312*	1.000						
BGD	0.072	-0.075	-0.031	0.413*	-0.021	1.000					
BDIL	-0.049	0.136	0.036	0.317*	0.264*	0.239*	1.000				
MOW	0.036	-0.036	0.123	0.114*	-0.046	0.080	-0.015	1.000			
LEV	-0.024	-0.031	-0.071	0.064	0.239*	0.036	-0.002	-0.004	1.000		
ROA	-0.018	0.048	-0.010	0.065	0.056	0.019	0.028	-0.108	0.278	1.000	
FSIZE	0.050	0.198	0.172	0.355*	0.228*	0.195*	0.274*	0.195*	0.044	-0.067	1.000

Source: Author's Computation using STATA (2024)
Note: * = correlation is significant at 10%,

From the correlation matrix, the Market-to-Book ratio (MTB) has weak negative correlations with Board Independence (BIND), Board Size (BSIZE), Board Diligence (BDIL), Leverage (LEV), and Return on Assets (ROA), and weak positive correlations with Board Gender Diversity (BGD), Managerial Ownership (MOWN), and Firm Size (FSIZE). Similarly, Negative Accrual Based Accounting Conservatism (ACCR) and Hidden Reserve Based Accounting Conservatism (HDR) also exhibit negative correlation with all the independent and the control variables.

Regression Analysis

Multiple regression analysis was employed to test the hypotheses, using the Hausman specification test results to choose the appropriate model.

Model 1: Market-To-Book Ratio Based Accounting Conservatism

Based on the result of the Breusch-Pagan Lagrange Multiplier test which indicated that there is no significant evidence of heteroscedasticity for model 1, the study has adopted the random effect GLS model for the regression analysis.

Table 4:Regression Results (Random Effect GLS)

Variable	Coefficients	Std. Error	z-value	P-Value
Constant	1637.83	1647.23	0.99	0.320
BIND	-212.68	195.65	-1.09	0.277
BSIZE	12.37	18.58	0.67	0.506
BGD	-437.01	439.40	-0.99	0.320
BDIL	-30.24	23.66	-0.28	0.101
MOW	-157.93	160.75	-0.98	0.326
LEV	-0.077	0.036	-2.15	0.031
ROA	639.63	472.03	1.36	0.175
FSIZE	19.83	11.26	1.76	0.078
R^2 within		= 0.236		
between		= 0.022		
overall		= 0.048		
F- Statistic		= 10.80		
Probability		= 0.000		

Source: Author's Computation using STATA (2024)

Model 2: Negative Accrual Based Accounting Conservatism

Based on the Hausman specification test, the fixed effect model is more suitable for model 2, hence it is used for the regression analysis.

Table 5: Regression Results (Fixed Effect)

Variable	Coefficients	Std. Error	t-value	p-value
(Constant)	-1.0810	1.6010	-0.68	0.499
BIND	7.1808	1.6810	0.04	0.966
BSIZE	5.7209	1.4409	3.96	0.000
BGD	-4.1910	3.1710	-1.32	0.188
BDIL	2.4108	2.6809	0.09	0.928
MOW	-1.0811	2.1410	-5.04	0.000
LEV	-3.3807	5.1762	-6.54	0.000
ROA	4.6409	2.1510	0.22	0.829
FSIZE	1.4009	5.4308	2.58	0.010
R^2 within		0.2358		
between		0.0223		
overall		0.0476		
F- Statistic		10.80		
Probability		0.000		

Source: Author's Computation using STATA (2024)

Model 3: Hidden Reserve Based Accounting Conservatism

Based on the Breusch-Pagan Lagrange Multiplier test which suggested that the random effects model may not be the most appropriate for model 3, hence pooled OLS model was used to analyse model 3.

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Table 6: Regression Results (OLS)

Variable	Coefficients	Std. Error	t-value	p-value
(Constant)	-0.1635	0.2914	0.38	0.702
BIND	0.4555	0.2898	1.62	0.106
BSIZE	0.0064	0.0207	0.32	0.746
BGD	-0.8828	0.5476	-1.64	0.101
BDIL	-0.0115	0.0462	-0.26	0.798
MOW	0.4285	0.2730	1.68	0.094
LEV (Control)	-0.0001	0.0001	-1.34	0.180
ROA (Control)	0.1832	0.4182	0.44	0.659
FSIZE (Control)	0.0204	0.0097	2.13	0.034
R^2		0.057		
Adj R^2		0.033		
F- Statistic		2.35		
Probability		0.018		

Source: Author's Computation using STATA (2024)

The regression results in Table 4 fail to reject all the hypotheses (H0) formulated for this study under model 1 while the results in Table 5 for model 2 rejected H02 and H05 at 1% significance level. This suggests that board size has significant effect on accounting conservatism and managerial ownership has significant effect on accounting conservatism respectively. Table 6 indicates that the result only H05 is rejected at 10% significance level under model 3 implying managerial ownership has significant effect on accounting conservatism. In summary, there is no evidence from the regression analysis to show board independence, board gender diversity, and board diligence significantly affect accounting conservatism of listed manufacturing companies in Nigeria under any of the three models.

Discussion of Findings

Board Independence and Accounting Conservatism

The results for Board Independence and Accounting Conservatism, as presented in Table 5 and Table 6 for Model 2 and Model 3 respectively, indicate that Board Independence has positive impact on accounting conservatism among manufacturing firms in Nigeria but not at significance level. This finding is consistent with the study's a priori expectation, which anticipated a positive relationship between board independence and conservative reporting. The theoretical underpinning suggests that the independence of a board of directors positively influences the handling of policy matters without undue influences or biases from internal sources within the organization. These results align with prior studies such as Christian et al.

(2020), Emmanuel and Salisu (2021) and Ukpong et al (2023) which all reported a positive effect of board independence on conservative accounting.

However, the findings contradict the evidence provided in the works of Suleiman et al. (2020) and Saeed (2020), who utilized accounting quality as a proxy for accounting conservatism and found a negative and insignificant causal link between them. Interestingly, the result for board independence in Model 1 aligns more closely with the findings of Suleiman et al. (2020) and Saeed (2020).

Board Size and Accounting Conservatism

Results of all three models demonstrate that the effect of board size is positive on accounting conservatism but only significance in Model 2. This aligns with the study's a priori expectation that large board size positively influences accounting conservatism by enhancing monitoring processes. This finding is consistent with previous research by Emmanuel and Salisu (2021) and Ukpong et al. (2023), which argued that larger boards facilitate greater scrutiny of management decisions, leading to more conservative reporting. However, contrary findings have been reported by studies such as those by Saeed (2020). These studies suggest a negative causal link between board size and conservative reporting, positing that larger boards may create agency problems and become unwieldy for effective management.

Board Gender Diversity and Accounting Conservatism

For board gender diversity, the results of this study present an intriguing deviation from the anticipated outcomes. Across all three models, gender diversity (GD) was found to have an insignificant negative impact on accounting conservatism. This contradicts the a priori expectation of the study, which expected a positive impact of board gender diversity on conservative accounting particularly the study of Abuaja (2023). This researcher reported a positive relationship between gender diversity and accounting conservatism, suggesting that increased gender diversity within a company could lead to more conservative accounting practices.

However, the findings of this study align with other research that indicates a negative relationship between these variables. For instance, studies by Musa and Temitope (2023). This implies that companies with greater gender diversity might be more inclined to adopt aggressive accounting practices, rather than conservative ones.

Board Diligence and Accounting Conservatism

The findings of this study regarding board diligence present a complex picture. In the second model, board diligence was found to have a positive impact on accounting conservatism. This suggests that a diligent board, which holds regular board meetings and thorough in its duties, can promote more conservative accounting practices. This finding aligns with the general expectation that diligent boards would be more risk-averse and thus lean towards conservative accounting.

However, in models 1 board diligence was found to have a insignificant negative impact on accounting conservatism just as Model 3. This unexpected finding contradicts the earlier findings in Model 2 and challenges the notion that more diligent boards lead to more conservative accounting. Prior research on this topic has yielded mixed results. Some studies have supported the positive relationship between board diligence and accounting conservatism, emphasizing the role of diligent boards in ensuring the accuracy and transparency of financial reporting (Abuaja, 2023).

Managerial Ownership and Accounting Conservatism

Lastly the examination of managerial ownership (MOWN) in relation to its impact on accounting conservatism (ACON) yielded intriguing results across the three models. In Model 2 and 3, MOWN demonstrated a significant relationship with ACON, suggesting that an increase in managerial ownership leads to higher levels of accounting conservatism. This aligns with a priori expectation, indicating that managers with larger ownership stakes are more inclined to adopt conservative financial reporting practices. These findings corroborate the results of prior studies by Chiedu et al. (2022), Asiriuwa et al. (2019) and Alves (2020) which also reported a significant effect of managerial ownership and accounting conservatism.

However, the results take a different turn in Model 1, where the impact of managerial ownership on accounting conservatism becomes negative and statistically insignificant. This unexpected finding contradicts the earlier positive relationship observed in Models 2 and 3, and challenges the notion that higher managerial ownership leads to more conservative financial reporting. This discrepancy underscores the complexity of the relationship between managerial ownership and accounting conservatism and suggests that additional factors may be at play.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study analyzed the relationship between corporate governance mechanisms and accounting conservatism in Nigerian manufacturing firms over 2013-2022 using three models. The findings revealed nuanced effects of board independence, board size, board gender diversity, board diligence, and managerial ownership. Model 2 (accrual-based conservatism) provided the most consistent and significant results, highlighting its effectiveness in capturing the dynamics of corporate governance's influence on accounting conservatism. These insights suggest that policymakers should formulate guidelines promoting conservative accounting practices, enhancing transparency and accountability in the corporate sector.

Recommendations

Based on the findings, this paper proffered the following recommendations were proffered:

1. Companies should regularly review board composition to maintain an optimal mix of independent and non-independent directors.
2. Firms should consider expanding board size, balancing potential benefits against drawbacks like slower decision-making.
3. Companies should strive for gender diversity on boards for its broader benefits, despite its varying impact on accounting conservatism.
4. Firms should foster a culture of diligence among board members through regular training and robust performance evaluations.
5. Companies should carefully manage ownership structures, encouraging managerial ownership with policies like stock option plans, while being mindful of associated risks.

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