Tax Policy and Foreign Direct Investment in Nigeria

Nosakhare OGBOMO

MAT NO: PG/MGS1314771

Being a Thesis Submitted to the Department of Accounting, Faculty of Management Sciences, College of Post Graduate Studies, University of Benin in Partial Fulfilment of the Requirements for the Award of Master of Philosophy(M.phil) Degree in Accounting.

February, 2026

DECLARATION

I, Nosakhare OGBOMO, hereby declare that this Thesis work titled ‘’Tax Revenue and Foreign Direct Investment in Nigeria: The Moderating Role of Tax Incentives’’ submitted to the Department of Accounting is an original work done by me under the supervision of Prof. P.O. Ibadin in the Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City.

1. All ideas in this work fully expressed in writing are products of my personal research work and that of others have been duly referenced and acknowledged.
2. Any litigation or liability arising from the work is to be wholly borne by me and not my Supervisor.

_____

Nosakhare OGBOMO

_____

Date

CERTIFICATION

Ogbomo Nosakhare, a postgraduate student with Matriculation Number: **PG/MGS1314771** has satisfactorily completed the requirement for the course and research work in the Department of Accounting, University of Benin, Benin City,in partial fulfilment for the award of Masters of Philosophy (M.phil) degree in Accounting.

_____

Prof. P.O. Ibadin
(Supervisor)

_____

Date

_____

Prof. O. Obaretin
(Head of Department)

_____

Date

DEDICATION

This project is dedicated to God Almighty for His Grace and Mercy.

ACKNOWLEDGEMENTS

An excellent and successful academic work would not have been a reality without the unalloyed support, advice and encouragement of well-meaning individuals and personalities whom God brought to me.

My immense thanks go to the Almighty God for His enabling grace and mercy in making the entire programme a success. My gratitude goes to my thesis supervisor, Prof. P.O. Ibadin whose guidance, tolerance, constructive criticism and understanding provided the basis for the successful completion of this thesis. My thanks also go to the Head of Department, Prof. O. Obaretin, prof. N. Ohonba, Dr. G. Ikhu-omoregbe, Dr. H. Monye-Emina, Dr. E. Aronwan and all the lecturers in the Department of Accounting for their strong academic support over the years. Sincerely, I am highly favoured and extremely humbled by their impartation and investment in me. I also thank all the non-academic staff of the Department of Accounting for their goodness and support.

My sincere and special thanks go to my father of blessed memory Mr. Nicholas Ogbomo, my mum Mrs Comfort Ogbomo, my lovely wife Mrs Oseobulu Ogbomo and my children Uyiosa and Oyenmwenosa Ogbomo for their great support in my academic pursuit. I also appreciate my siblings, Mr. Osazuwa Ogbomo, Dr. Iyobosa Ogbomo, Mr. Etinosa Ogbomo, Itohan Ogbomo PharmD, my niece and nephew, Daniela Ogbomo, Daniel Ogbomo and Divine Ogbomo, Jamson, Jayden and Jasmine Ogbomo, my great uncle, Mr. Bernard Aigbe and family.

Worthy of recognition is the Head of Audit Department, University of Benin Teaching Hospital, Mrs Helen Asekome, in addition Bar. Obaroghedo Osakue, Esosa Ugiagbe and the entire staff of the Department who never failed me whenever I needed their support.

Also to be acknowledged are my great in-laws and friends who contributed to my academic success: they include Mrs Beatrice Okoh, Ehi Okoh, Osebhor Okoh, Mr. Iyore Osarobo, Dr. Imobio Ehichioya, Mr. Okodo Doxie, Edith Imouokhome; Ushering Unit, Living Faith Church Ugbowo and others who were of assistance in my academic success. I say may God bless and increase them all in Jesus name.

ABSTRACT

This study examined the effect of Tax Policy on Foreign Direct Investment (FDI) inflows in Nigeria, with particular emphasis on the moderating role of tax concessions.

Using annual time-series data spanning 1994-2024, the study employed a short-run Autoregressive Distributed Lag (ARDL) framework to analyse the dynamic relationships between major tax policy instruments, tax concessions, and foreign direct investment. The analysis focused on Company Income Tax (Cit), Customs and Excise Duties (Ced), Petroleum Profit Tax (Ppt), Value Added Tax (Vat), and Tax Concessions (TAXC), while controlling for exchange rate movements (EXR) and corruption rating (COR).The results of the Augmented Dickey-Fuller (ADF) unit root tests showed that the variables attained stationarity at different levels, while the autoregressive distributed lag (ARDL) bounds tests indicated the absence of cointegration and a long-run equilibrium relationship among the variables, thereby justifying reliance on short-run dynamic estimation.

The empirical findings from the baseline model revealed that CIT, CED, PPT, VAT, and TAXC do not exert statistically significant direct short-run effects on foreign direct investment inflows in Nigeria. However, the results of the moderated model indicate that TAXC significantly moderate the relationships between CIT and FDI, as well as between VAT and FDI. These findings indicate that tax concessions function more effectively as complementary fiscal instruments that condition the impact of selected taxes rather than as standalone investment incentives. In contrast, tax concessions were found not to significantly moderate the effects of CED or PPT on FDI.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The increasing globalization of business operations and the gradual removal of restrictions on international capital movements have intensified competition among governments to attract Foreign Direct Investment (FDI), often through the use of tax-related incentives and reforms (Appiah-Kubi et al., 2021). FDI remains a crucial driver of economic growth, providing host countries with numerous benefits such as capital inflow, job creation, tax revenue, technological advancement, and positive spillover effects. A continuous inflow of FDI contributes to knowledge transfer, human capital development, and enhanced productivity (Alade & Elosioba, 2024). To enhance FDI attraction, the Nigerian government, through various economic and fiscal reforms, has consistently prioritized tax policies as a key component of its investment and development strategy (Olaniyi et al., 2018). These policies are specifically designed to make the Nigerian economy more conducive to both local and foreign investors (Olaniyi et al., 2018).

The positive and indirect impact of tax policy on FDI becomes evident when higher tax revenue results from increased economic activity due to horizontal spillover effects. The extent of this impact, however, depends on the level of competition and the degree of technological diffusion from multinational corporations (MNCs), both of which stimulate productivity in host economies (Nguyen et al., 2014).

Taxes constitute one of the most fundamental and sustainable sources of government revenue, enabling the financing of public expenditure and infrastructural development. For tax systems to function effectively, governments must create an enabling environment characterized by political stability, security, and adequate infrastructure that support business

operations. To ensure compliance, taxation must also follow equity principles particularly the principle of ability to pay to prevent excessive burden and resentment among taxpayers (Kyari, 2020). Furthermore, tax policy directly influences investment decisions, as it determines the attractiveness of a country to potential investors. An optimal tax system not only enhances revenue generation but also stimulates FDI inflows, thereby supporting broader economic performance (Efanga et al., 2020).

In Nigeria, various tax instruments such as company income tax, petroleum profit tax, value-added tax, and customs and excise duties constitute major sources of government revenue and play key roles in encouraging investment in productive sectors like manufacturing (Adegbite & Akande, 2017). Tax policy is thus an essential instrument for fiscal management and economic development, particularly in developing economies like Nigeria (Adegbite & Akande, 2017).

To attract and retain foreign investors, governments often introduce tax incentives such as tax concessions, tax holidays, import duty reliefs, investment tax credits, and oil exploration allowances etc to make their economies more appealing (Efanga et al., 2020; Adegbite & Akande, 2017). These incentives, which may involve partial or complete reductions in tax liabilities, are designed to encourage investment, job creation, exports, and sustainable industrial growth (Sanni, 2017). Fletcher (2002) defines tax incentives as special tax provisions granted to eligible investment projects that differ from standard tax treatments. Globally, tax incentives have been recognized as effective mechanisms for stimulating financial activity and promoting investments, particularly in manufacturing and technology sectors (Jensen & Malesky, 2010). Such incentives typically take the form of deductions,

exemptions, accelerated depreciation, investment allowances, or tax credits that provide preferential tax treatment to qualifying investors (Fletcher, 2003; Ngure, 2018).

Governments worldwide continue to employ a range of tax policy instruments to attract both domestic and foreign investment (Adegbite & Akande, 2017). In many developing countries, these policies and incentives are introduced as compensatory mechanisms for structural inefficiencies such as inadequate infrastructure, bureaucratic delays, and political instability in order to attract foreign direct investment (Clark, 2007).

In the Nigerian context, recent tax reforms have aimed to strengthen revenue mobilization through efficiency improvements, broadened tax coverage, and enhanced transparency via digitalization. However, the success of these reforms in attracting FDI depends on the government's ability to balance the need for increased revenue with maintaining an investor-friendly tax environment (Nigeria Tax Act, 2025).The motivation for this study arises from Nigeria's current economic challenges, where many multinational firms are exiting the market due to exchange rate volatility and high inflation. This research therefore seeks to determine whether Nigeria's tax policies and incentive frameworks can attract and retain foreign investors, thereby stabilizing the exchange rate, reducing inflation, and improving overall revenue performance.

1.2 Statement of the Research Problem

Foreign Direct Investment (FDI) is widely recognized as a critical driver of economic growth, technology transfer, employment generation, and productivity enhancement, particularly in developing economies (Alade & Adeleke, 2021). Consequently, governments across the world have adopted various tax policy measures aimed at attracting and sustaining the inflow of FDI

(Olaniyi et al., 2018). Existing empirical studies such as (Alade & Adeleke, 2021; Amadou et al, 2019; Olaniyi et al., 2018; and Loan-Alin & Dragos 2013) have largely examined the direct relationship between tax policy variables such as corporate tax rates, tax revenue, and tax burden and FDI inflows. While these studies provide useful insights, their findings remain mixed and often inconclusive; suggesting that tax policy alone may not sufficiently explain variations in FDI attraction across countries.

A major limitation in the existing literature is the inadequate consideration of tax incentives as a moderating mechanism through which tax policy influences FDI. Most studies treat tax incentives such as tax holidays, investment allowances, capital allowances, and reduced tax rates as independent explanatory variables, rather than examining how they condition or alter the effectiveness of broader tax policy frameworks. This approach fails to capture whether and to what extent tax incentives strengthen, weaken, or neutralize the impact of general tax policy on foreign investors' location decisions.

Furthermore, there is limited empirical evidence on how the interaction between tax policy and tax incentives operates within developing and emerging economies, where institutional quality, fiscal capacity and policy credibility differ significantly from those of developed economies. In such contexts, generous tax incentives may either enhance the attractiveness of tax policy or, conversely, undermine revenue generation without producing commensurate FDI gains. The absence of studies explicitly modelling the moderating role of tax incentives has created a gap in understanding the conditions under which tax policy becomes effective in attracting FDI.

As a result, policymakers continue to implement tax incentives without clear empirical guidance on their moderating effectiveness, leading to potential revenue losses, inefficient tax

competition, and suboptimal investment outcomes. Addressing this gap by examining the moderating role of tax incentives in the relationship between tax policy and FDI is therefore essential for developing evidence-based tax strategies that balance investment attraction with sustainable revenue generation. For the purpose of this study tax concession will be used to capture tax incentives. The choice of tax concession policies is based on their ability to capture various tax incentives which include tax holidays, reduced corporate income tax rates, pioneer status incentives, capital allowances, and import duty exemptions. Although tax concessions are widely used as a policy tool to attract FDI in Nigeria (Appiah-Kubi et.al., 2021), their effectiveness remains inconclusive. Africa continues to experience inconsistent FDI inflows despite generous tax incentives, suggesting that tax concessions alone may not be sufficient to attract and retain foreign investors (Appiah-Kubi et al., 2021). This study therefore seeks to examine the impact of tax policy coupled with tax incentives on FDI in Nigeria using tax concessions to capture tax incentives and to assess whether such incentives justify their fiscal cost. The study further integrates multiple tax policy variables such as the Company Income Tax Rate, Custom Excise Duty Rate, Petroleum Profit Tax Rate and Value Added Tax Rate (CIT, CED, PPT, VAT) alongside control variables such as Exchange Rate (EXR) and Corruption Rate (COR)**,** using data sourced from the Central Bank of Nigeria's Statistical Bulletin. This comprehensive approach aims to resolve inconsistencies in prior empirical findings and to provide fresh insights into how tax policies and incentives jointly shape FDI inflows in Nigeria. Furthermore, previous research indicates that when VAT is levied on capital goods without prompt input credit, investment costs rise, thereby discouraging FDI (Klemm & van Parys, 2012). Differential tax rates and exemptions can also distort sectoral investment patterns. In Nigeria, the limited integration of long term macroeconomic data with sector specific tax policies has

hindered the development of a coherent policy framework. This study seeks to bridge that gap by applying time-series econometric techniques, including trend analysis and descriptive statistics, with the Auto-regression Distributed Lag (ADRL) which served as the main analytical tool for assessing the moderating role of tax incentives on the relationship between tax policy and FDI inflows as against previous studies which have been using ordinary least square analytical tool.

By combining these tax policy components, tax incentive measures, and control variables (exchange rate and corruption); the study aims to offer a more comprehensive understanding of the complex interactions affecting FDI inflows in Nigeria. Exchange rate fluctuations directly influence the cost of imported raw materials and equipment, thereby affecting production costs and profitability (Alade & Adeleke, 2021). Likewise, corruption can increase the cost of investment, as firms may resort to bribery to access government incentives intended to attract FDI. These dynamics collectively justify the need for an all sectoral investigation into how tax policy, incentives, and macroeconomic variables shape Nigeria's capacity to attract and sustain foreign direct investment.

Flowing from the above research problem are the following research questions;

1. What effect does Company Income Tax have on Foreign Direct Investment inflows in Nigeria?
2. How do Customs and Excise duties affect Foreign Direct Investment inflows in Nigeria?
3. What is the effect of Petroleum Profit Tax on Foreign Direct Investment inflows in Nigeria?
4. How does Value Added Tax influence Foreign Direct Investment inflows in Nigeria?

5. What is the direct effect of tax concessions on foreign direct investment inflows in Nigeria?
6. Does Tax Concessions significantly moderate the relationship between Tax Policy and Foreign Direct Investment inflows in Nigeria?

1.3 Research Objectives

The broad objective of this study is to evaluate the effect of tax policy on foreign direct investment inflows into Nigeria, with particular emphasis on the moderating role of tax concessions. The specific objectives of the study are to:

1 examine the effect of company income tax on foreign direct investment inflows in Nigeria;

2 assess the effect of customs and excise duties on foreign direct investment inflows in Nigeria;

3 evaluate the effect of petroleum profit tax on foreign direct investment inflows in Nigeria;

4 determine the effect of value added tax on foreign direct investment inflows in Nigeria;

5 examine the direct effect of tax concessions on foreign direct investment inflows in Nigeria;

6 assess the effect tax concessions moderate on the relationship between tax policy and foreign direct investment inflows in Nigeria;

1.4 Research Hypotheses.

To address the research questions and objectives of the study as stated above, the following hypotheses are formulated in the null form:

$H0_1$: Company income tax has no significant effect on foreign direct investment inflows in Nigeria.

Ho_2: Customs and excise duties have no significant effect on foreign direct investment inflows in Nigeria.

Ho_3: Petroleum profit tax has no significant effect on foreign direct investment inflows in Nigeria.

Ho_4: Value added tax has no significant effect on foreign direct investment inflows in Nigeria.

Ho_5: Tax concessions have no significant direct effect on foreign direct investment inflows in Nigeria.

Ho_6: Tax concessions do not significantly moderate the relationship between company income tax and foreign direct investment inflows in Nigeria.

Ho_7: Tax concessions do not significantly moderate the relationship between customs and excise duties and foreign direct investment inflows in Nigeria.

Ho_8: Tax concessions do not significantly moderate the relationship between petroleum profit tax and foreign direct investment inflows in Nigeria.

Ho_9: Tax concessions do not significantly moderate the relationship between value added tax and foreign direct investment inflows in Nigeria.

1.5 Scope of the Study.

This study examines the relationship between tax policy and Foreign Direct Investment (FDI) in Nigeria using annual time-series data covering the period from 1994 to 2024. The study focuses

on selected tax policy variables that are considered relevant to influencing FDI inflows into the Nigerian economy. The analysis is limited to Nigeria because the country has experienced several tax reforms aimed at improving the investment climate and stimulating economic growth.

The data used in this study were generated from secondary sources, primarily the statistical publications and annual reports of the Central Bank of Nigeria (CBN). Additional data were obtained from relevant government institutions such as the Federal Inland Revenue Service, the National Bureau of Statistics, and internationally recognized databases, where necessary, to ensure completeness, consistency, and reliability of the variables employed in the analysis. The variables include Foreign Direct Investment (FDI) inflows as the dependent variable and selected tax policy indicators, alongside relevant macroeconomic control variables.

The study covers a 31-year period (1994–2024), which was deliberately selected rather than sample. The period was chosen because it captures major phases of Nigeria's fiscal and economic reforms, including the post-Structural Adjustment Programme (SAP) era, the implementation of the National Economic Empowerment and Development Strategy (NEEDS), successive tax policy reforms, and other significant changes in the country's investment and tax administration framework. The selected period also ensures the availability of consistent annual data required for robust time-series econometric analysis and provides sufficient observations to improve the reliability and validity of the empirical findings. Unlike survey-based studies, this research does not employ probability or non-probability sampling techniques because it relies on annual macroeconomic time-series data. Instead, the study utilizes a census of all available annual observations within the selected period (1994–2024). This approach minimizes sampling bias,

enhances the representativeness of the data, and allows for a comprehensive assessment of the long run relationship between tax policy and FDI in Nigeria.

1.6 Significance of the Study

This study is expected to make significant theoretical, empirical, and policy contributions by providing evidence on the effectiveness of tax policy in attracting Foreign Direct Investment (FDI) while ensuring sustainable revenue generation.

Policymakers: The findings of this study will assist policymakers, particularly those responsible for fiscal and investment policies, in designing tax policies that effectively attract foreign direct investment without undermining government revenue. The study will provide empirical evidence on the extent to which different tax policy instruments, including tax incentives, influence FDI inflows in Nigeria. This will support the formulation of balanced tax reforms that promote investment, economic growth, and fiscal sustainability.

Government and Revenue Authorities: The study will benefit government agencies and revenue authorities, such as the Federal Inland Revenue Service, by providing evidence on the revenue implications of tax incentives and other fiscal measures. The findings will help evaluate whether existing tax concessions achieve their intended investment objectives and whether they justify the associated revenue costs. This information can support more efficient tax administration, improved revenue mobilization, and better allocation of fiscal resources.

Researchers and Academics: This study will contribute to the existing body of knowledge by extending the literature on the relationship between tax policy and foreign direct investment in developing economies, particularly Nigeria. It will address identified empirical and

methodological gaps by providing updated evidence using recent data and robust analytical techniques. The findings will also serve as a valuable reference for future researchers interested in taxation, investment, public finance, and development economics.

Investors: Both domestic and foreign investors will benefit from the findings by gaining a clearer understanding of how Nigeria's tax policies, incentives, and fiscal environment influence investment decisions. The study will provide information that can support strategic investment planning by identifying the tax policy conditions that encourage investment, improve business competitiveness, and reduce investment uncertainty.

International Development Partners: International development institutions, donor agencies, and investment promotion organizations will benefit from the study by gaining empirical evidence on how fiscal policy can be leveraged to attract productive foreign investment while maintaining revenue sustainability. The findings may inform policy dialogue, technical assistance, and development programmes aimed at strengthening Nigeria's investment climate and economic development.

1.7 Limitations of the study

This study had some limitations which however do not diminish the result and findings, given the corrective measures taken to minimize their impact.

1. Due to the fact that the data for the study are secondary data which are to be extracted from World Bank’s World Development Indicators, the United Nations Development Programme, the National Bureau of Statistics, and the Central Bank of Nigeria Statistical Bulletins, there were at some point non availability of up to date data. However the econometrics/ statistical package used accounted for the unbalanced nature of the data.

2. The use of sample size instead of the entire population of the study. However, the sample size was sufficient enough to account for the parameters of the population.
3. Measurement of variable: The measurement of Variables followed globally recognised empirical standards.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This study investigates the effect of Tax Policy in attracting Foreign Direct Investment into Nigeria. The core of this chapter reviews the extant literature on Tax Policy and Foreign Direct Investment. The following sections are discussed in this chapter: Section 2.2 focuses on the Concept of Foreign Direct Investment; this is closely followed by 2.3 on Measurement of Foreign Direct Investment; followed by 2.4 on Tax Policy and Foreign Direct Investment and all related variables. This is closely followed by section 2.5 which is on Theoretical Review. Section 2.6 reviews Related Studies, which harped on the Core Independent Variables and the Control Variables.

2.2 Foreign Direct Investment

When investors from another country invest in a business entity, it is known as cross-border investment (FDI). International standards (IMF, UNCTAD) define FDI as an investment where a foreign investor owns at least 10% of the voting power in an enterprise located in another country. This threshold distinguishes FDI from portfolio investment (Appiah-Kubi et al., 2021). The Organization for Economic Cooperation and Development (OECD) (2008) defines FDI as an incorporated or unincorporated enterprise in which a single foreign investor either owns 10 percent or more of the ordinary shares or voting power of an enterprise or owns less than 10 percent of the ordinary shares or voting power of an enterprise, but maintains an effective voice in management. Several factors influences the choice of FDI destination, one of which is tax policy.

Products made in one nation may be sold entirely or in part to another. It is an export to the nation that sells the items and an import to the country that purchases them.

Oyatoye et al. (2011) defined export as the amount and value of goods that leave the nation. According to Jayakumar et al. (2014), it is a type of international trade in which items made in one nation are sent to another for future sale or trade, with the proceeds from these sales

increasing the gross production of the producing nation. Therefore, the decision to export is based on the expenditures of foreign consumers or foreign businesses that buy domestic products and services. While imports rely on factors within the domestic economy, exports may be influenced by spending dimensions from domestic residence. This is autonomous or exogenous spending, from the point of view of determination of domestic GDP (Lipsey & Chrystal, 2011).

FDI inflows could refer to the investments made by foreign entities into a country, while outflows represent investments made by domestic entities in foreign countries. Ideally, annual inflows should equal annual outflows, but discrepancies often arise due to various factors, including economic conditions and regulatory environments (Karimi & Wanjohi, 2024). FDI are categorized into Horizontal FDI which means investment in the same industry abroad as the investor's home country, Vertical FDI which means investment in different stages of production in a foreign country, which can be further divided into backward and forward vertical investments, then Conglomerate FDI which also mean investment in unrelated businesses in a foreign country. Platform FDI: Investment aimed at producing goods for export to third countries (Karimi & Wanjohi, 2024).

2.3 Measurements of Foreign Direct Investment

Measuring Foreign Direct Investment (FDI) could involve assessing cross-border transactions related to direct investment, typically focusing on inflows and outflows. The measurement of FDI involves capturing cross-border investment flows and positions that reflect a lasting interest and significant influence by a foreign investor in a host economy (Kyari, 2020).

However, due to the complexity of multinational activities, FDI measurement remains challenging (Kyari, 2020). FDI is measured based on the principle of control or significant influence, rather than mere ownership of financial assets. FDI consists of three main components which include Equity capital, Reinvested earnings and Intra-company loans (debt instruments)(Olaniyi et al., 2018), and are commonly measured using three broad approaches which include FDI flows, FDI stocks ,FDI income and each approach serves different analytical purposes (Olaniyi et al., 2018).

FDI measures the flow of the value of cross-border direct investment transactions within a specific period (usually annually or quarterly). It includes Inward FDI flows which are investments made by foreign investors into the host economy and Outward FDI flows which are also investments made by domestic investors abroad (Adebisi, 2020). Components of FDI Flows includes New equity capital injections, Reinvested profits not distributed as dividends and Net intercompany borrowing between parent firms and affiliates (Adebisi, 2020). The measurement of FDI is multifaceted, encompassing flows, stocks, income, direction, and sectoral distribution (Bwesh et al., 2021). While international standards have improved comparability, measurement challenges persist due to globalization, complex corporate structures, and data limitations. Accurate measurement of FDI is essential for understanding its economic impact, formulating effective investment policies, and assessing development outcomes (Bwesh et al., 2021).

FDI is a foreign direct investment which is measured by investment inflow to a country other than the investor's country and the activities revolve around long term interim interest and management contract over firms operating in a host country (Oruwari, 2022)

Appiah-Kubi et.al. (2021) measured FDI as a share of GDP (net inflows of FDI as a % of GDP) of various organizations. OECD, provide guidelines and standards for collecting and analyzing FDI statistics to ensure consistency and accuracy in reporting (OECD, 2008).

Institutions such as the International Monetary Fund (IMF) and the Organization for Economic Co-operation and Development (OECD) established guidelines for assessing foreign direct investment (FDI). These frameworks provide criteria for classifying FDI according to factors like ownership structure, level of control, and the type of investment involved (OECD, 2008). Governments and international organizations conduct surveys to gather data on FDI activities, recorded in the balance of payments, which tracks all economic transactions between residents and non-residents and then are integrated into national accounts to assess its impact on economic growth (Karimi & Wanjohi, 2024).

FDI Measurement is important because it helps policymakers make informed decisions regarding economic policies and investment strategies, job creation, technology transfer, and overall economic development. When measuring FDI there are some challenges that could be encountered. Hence the accuracy of reported data can be challenging due to differences in definitions and reporting practices across countries (Bweseh et al., 2021).Some FDI may not be captured in official statistics due to informal channels or unreported transactions. Changes in political stability and economic conditions can affect FDI flows, complicating measurement

efforts (Karimi & Wanjohi, 2024).

2.4 Tax policy

Tax policy is a critical tool for economic management and development. The major components are tax base, tax rates, incentives, administration, equity, efficiency, simplicity, and

revenue sustainability which must be carefully designed and harmonized (Ogbonnaya et.al., 2025). A well-structured tax policy enhances revenue generation, promotes investment, ensures fairness, and supports sustainable economic growth, especially in developing economies such as Nigeria (Ogbonnaya et.al., 2025).

Tax policy could be seen as government's principles and rules for imposing and collecting taxes, balancing revenue generation for public services with broader economic goals like growth, fairness, and resource allocation, influencing individual behaviour, business investment, and income distribution through decisions on tax rates, taxable income, and incentives (Alade & Elosiuba, 2024).It's a crucial part of a country's fiscal strategy, impacting both microeconomic efficiency (fairness, ease of compliance) and macroeconomic stability (Alade & Elosiuba, 2024). Tax policy seeks to strike a balance between securing the revenues needed by governments to finance their social and economic programmes and strengthening the tax system's contributions to inclusive and sustainable economic growth (OECD, 2019). Tax policy could serve as a means through which income is generated by governments through taxation, and they are fundamentally the main source of funding for governmental operations, covering daily services, infrastructure, and social programs (Alade & Elosiuba, 2024). Tax policy comes from various components like income taxes, consumption taxes, duties, royalties, and more (Alade & Elosiuba, 2024). In Nigeria, tax policy could shape our tax revenue which then refers to the total income collected by the government primarily through the Nigeria Revenue Service (NRS) from both oil related taxes and non-oil taxes, such as Companies Income Tax (CIT), Value Added Tax (VAT), Education Tax, Stamp Duties, Capital Gains Tax, etc (Kyari, 2020). The FIRS is responsible for assessing, collecting, and accounting for these taxes on behalf of the federal government (Karimi & Wanjohi, 2024).

2.5 Tax Policy and Foreign Direct Investment and all related variables

Multinational firms often compare after tax policies when deciding where to invest (Gaspareniene et al., 2020). High corporate income tax rates could reduce expected profitability and adequate, stable tax revenue enables governments to finance roads, ports, electricity, education, health, legal systems, and other public goods that reduce operating costs and risks for foreign investors and well used tax revenue improves the investment climate and sustains productive FDI(Gaspareniene et al., 2020).Lower tax rates or generous tax incentives can make a location more attractive and then generate more revenue in the long run (Kyari, 2020).

An incentive can be described as any factor that motivates or encourages an individual or entity to take a specific action. Consequently, a tax incentive refers to any deliberate measure implemented by the government to modify the tax system in a manner that benefits potential taxpayers (Dotun, 2016). According to Sanni (2017), tax incentives involve a purposeful reduction or complete exemption of tax obligations by the government to motivate economic agents to behave in ways deemed desirable such as increasing investment, expanding employment, boosting exports, enhancing sales, reducing consumption, curbing imports, or minimizing pollution. Similarly, the Oxford Advanced Learner's Dictionary defines tax incentives as a reduction in the effective tax burden on a targeted activity compared to its existing rate, with the expectation that the short-term loss in government revenue will be offset by long-term economic growth and higher total revenue generated from an expanded economic base.

Klemm (2010) defined tax incentives as measures that provide for a more favourable tax treatment of certain activities or sectors compared to what is granted to the general industry'. This suggests that the implementation of tax incentives may initially lead to a short-term decline

in tax revenue, as the government prioritizes the anticipated long-term benefits expected to outweigh the temporary losses. It is important to note that most discussions on tax incentives tend to focus primarily on corporate tax rates, without a comprehensive assessment of the broader range of incentives available to investors. In many developing economies, tax incentive frameworks typically combine both targeted and general incentives, which may be embedded within income tax legislation or other related legal provisions. However, one should realize that granting tax incentives is not enough to compensate for poor investment climate in Africa where such other factors like political instability, racism, ethnicity, religious intolerance, kidnapping and the likes abound (Karimi & Wanjohi, 2024). Furthermore, Oriakhi and Osemwengie (2013) identified the following tax incentives used in Nigeria tax exemptions, investment allowances, investment reliefs in rural tax-free interest, tax deductible, research and development, tax-free dividends, tax breaks, and capital allowances.

Ohaka and Agundu (2012) asserted that tax incentives in Nigeria exist. According to Okauru (2017), tax incentives are primarily designed to reduce the tax burden on taxpayers in order to minimize tax evasion and avoidance. These incentives can encourage investment and thereby promote economic growth and development while shaping the nature and structure of private sector participation. So as the Nigerian market continues to evolve and become more responsive, potential investors and competitors stand to gain a significant advantage.

2.5.1 Company Income Tax and FDI

Company income tax are a common form of tax policy used by both developed and developing countries and countries with economies in transition to generate revenue and to

attract FDI(Kyari, 2020). Company Income Tax (CIT) is a tax policy known as corporate tax which could be direct tax levied on the net income or profit of corporations and business organizations. It is imposed by the government and serves as a significant source of public revenue (Alade & Elosiuba, 2024).

According to OECD (2021), corporate tax is "a tax imposed on the income or capital of corporations." The base of this tax typically includes gross revenue minus allowable business expenses, depreciation, and other deductions. CIT could serve dual purpose by raising revenue for public services and acting as a tool for economic regulation, such as controlling inflation or incentivizing investment (Alade & Elosiuba, 2024). Corporate income tax is a compulsory levy imposed on the chargeable profit of companies at a stipulated rate in a particular location (Alade & Elosiuba, 2024). Though this is seen as a burden, it influences the inflow and location of foreign direct investment (FDI) in a country (Okoi & Edame, 2013). According to Ong et al. (2012) corporate tax determines the disposable profit for multinationals and further argued that the burden of corporate tax negates the profit maximization principle for multinational enterprises in locating FDI for the obvious reasons that it reduces after tax profit, therefore, implying that multinationals can shift their investment from a location to another which appears to be favourable. High tax rate inclines to deter FDI. Thus to attract investment in a labour intensive industries which can be sited in other favorable location a reasonable corporate tax regime will be required (Golpira et al.,2016). Justman et al. (2005) argued that tax policies are fundamental for companies wishing to invest in other countries.

Corporate income tax has an impinging role in attracting foreign direct investment in any country (Olaniyi et al., 2018). Although, tax policies are not the most important determinant of foreign direct investment, they can have a major impact on investment decisions through their effects on

the cost of capital and on the expected profitability from a given investment (Olaniyi et al., 2018). In a globalized world characterized by increased capital mobility, a well-designed and administered tax system can have a strong impact in attracting investment (Clark, 2005). Investors benefit from lower tax rates and less complicated tax administration, while the government benefits from lower incidence of tax evasion, avoidance and other subversive tendencies. In general, there is a consensus among economists and financial experts that high corporate income tax tends to reduce foreign direct investment and business capital formation (Alade & Elosioba, 2024).

2.5.2 Custom Excise Duty and FDI

Customs duty refers to a tariff imposed on goods transported across international borders, primarily aimed at safeguarding a nation's economy, protecting local industries and employment and regulating environmental and security concerns. It serves as a mechanism for controlling the movement of goods particularly restricted or prohibited items into and out of a country (Bweseh, 2021). The duty rate, expressed as a percentage, is calculated based on the total purchase value of an item acquired abroad rather than its quality, size, or weight. The Harmonized Tariff System (HTS) specifies duty rates for virtually all existing products, and the Customs and Border Protection (CBP) agency rely on the HTS Schedule as a comprehensive reference guide that outlines applicable tariff rates and statistical categories for imported merchandise (Bweseh, 2021).

Several empirical studies have examined the relationship between tax policies and Foreign Direct Investment (FDI) inflows into Nigeria. George and Bariyima (2015) explored the effect of tax policy on FDI, using multiple regression and error correction models and found that FDI responds negatively and significantly to tax policy changes. Similarly, Adepeju and Adepeju

(2012) investigated the impact of tax revenue on FDI inflows in Nigeria's oil and gas sector. Using Karl Pearson correlation analysis, they concluded that tax incentives had a significant positive effect on FDI inflows. In another study, Fakile and Adegbile (2011) evaluated the effectiveness of tax revenue as a mechanism for attracting FDI and found that tax incentives played an important role in promoting both domestic and foreign investments.

However, the lack of consensus among these studies, coupled with their relatively narrow scope, underscores the need for further research. This current study therefore integrates various tax policy variables including company income tax, Value Added Tax (VAT), customs and excise duties, and petroleum profit tax offering a broader perspective than many previous studies that considered these factors in isolation. Furthermore, Maghori (2014**)** analyzed the determinants of FDI in Nigeria using time series data from 1970 to 2010 and employed an Error Correction Model (ECM). The findings indicated that the ratio of external debt to Gross Domestic Product (GDP) was the most significant determinant of foreign capital inflow in both the short and long run. Other variables such as national income, trade openness, previous foreign capital stock, inflation, and exchange rates were also found to have sustained effects on FDI inflows over time.

2.5.3 Petroleum Profit Tax (PPT) and FDI

Petroleum Profit Tax (PPT) serves as an essential fiscal instrument for governments aiming to attract foreign direct investment (FDI) into the oil and gas industry (Alade & Elosiuba, 2024). It remains a critical mechanism through which resource-rich nations generate revenue from petroleum extraction (Tordo et al., 2011). However, the structure and administration of PPT significantly determine the extent of FDI inflows into the sector. An efficient, transparent, and

stable PPT framework tends to encourage investment, while excessive tax burdens or unstable fiscal regimes may deter investors and drive them toward more favourable jurisdictions (Tordo et al., 2011).

To stimulate investment particularly in the downstream oil sector, governments often introduce fiscal incentives such as capital allowances and investment tax credits. Although these measures may initially reduce short-term government revenue, they can foster greater FDI inflows and yield higher long-term economic returns. While such incentives can improve project viability and promote economic expansion, policymakers must carefully assess their associated trade-offs (Bweseh, 2021). Achieving a balance between attracting investments and protecting public interests, including environmental sustainability, is crucial for ensuring the long-term success of the petroleum industry (Kyari, 2020).

The link between petroleum profit tax incentives and FDI is therefore pivotal in promoting investment within oil-producing economies. Empirical evidence suggests that favourable tax regimes can substantially enhance FDI inflows, especially in developing countries that depend heavily on petroleum resources (Karimi & Wanjohi, 2024). PPT incentives, designed to attract FDI and stimulate exploration and production, are particularly vital in nations endowed with hydrocarbon resources but constrained by limited capital and technology. By providing favourable tax conditions, governments create a more appealing investment climate for multinational oil corporations (Bweseh, 2021).

Common forms of PPT incentives include reduced tax rates, tax holidays, investment allowances, royalty relief, and loss carry-forward provisions**.** The latter allows firms to offset future profits against exploration and development losses, a particularly beneficial mechanism in

the volatile oil market characterized by fluctuating prices (Karimi & Wanjohi, 2024). These incentives can enhance project profitability, encourage exploration activities, promote technology transfer, and stimulate broader economic growth through job creation and infrastructure development generating positive multiplier effects across other sectors (Bweseh, 2021). Nonetheless, while PPT incentives can effectively attract FDI, they are not without challenges. Potential drawbacks include revenue loss, economic dependency on oil, environmental degradation, and social equity concerns (Olaniyi et al., 2018). Public discontent may also arise if citizens perceive that the benefits of natural resource extraction are unevenly distributed. Ensuring transparency and accountability in the design and implementation of tax incentives are therefore vital to maintaining public trust (Olaniyi et al., 2018).

Kyari (2020) empirically examined the adequacy of Nigeria's oil tax incentive framework in attracting FDI using data obtained through a five-point Likert questionnaire analyzed with descriptive statistics and the Kruskal-Wallis test. The findings revealed that Nigeria's oil tax incentives are both sufficient in number and appropriate in composition to attract foreign investment. The study concluded that the existing tax incentive structure within the Nigerian oil and gas industry is effective and well-balanced in promoting FDI inflows.

2.5.4 Value Added Tax and FDI

VAT is a widely used and efficient form of taxation that, when properly implemented, can support macroeconomic stability and revenue generation without directly deterring FDI (Klemm & van Parys, 2012). However, its effects on FDI depend on the design of the VAT system, administrative capacity, and the broader investment climate. Policymakers must ensure that VAT systems are neutral, transparent, and minimize compliance costs to enhance their

country's appeal to foreign investors FDI (Klemm & van Parys, 2012). Value Added Tax (VAT) could be seen as indirect tax that is levied on the value added to goods and services at each stage of production or distribution (Alade & Elosiuba, 2024). Unlike sales tax, which is collected only at the final point of sale, VAT is collected incrementally at every stage of the supply chain (Alade & Elosiuba, 2024). Keen and Lockwood (2010) describe Value Added Tax (VAT) as a comprehensive consumption-based levy imposed on the value added to goods and services, noting that it is generally more efficient and less distortionary compared to other indirect taxes. Similarly, the International Monetary Fund (IMF) characterizes VAT as a consumption tax applied to most goods and services purchased for use or consumption, where the ultimate tax burden rests on the final consumer, although it is collected incrementally at each stage of the production and distribution chain.

VAT could be operationalised through a system of input-output crediting, where businesses receive credits for the tax they pay on their purchases (inputs) and charge VAT on their sales (outputs) (Alade & Elosiuba, 2024). The difference between VAT collected on sales and VAT paid on purchases are remitted to the government as revenue (Alade & Elosiuba, 2024).

The relationship between VAT and FDI is complex and multifaceted. A growing body of empirical literature explores how the presence and structure of VAT influence the attractiveness of a country to foreign investors (Ebrill et al., 2001).

VAT is generally considered neutral with respect to production and investment decisions. Unlike corporate income taxes, VAT does not directly tax profits, making it less likely to deter investment (Ebrill et al., 2001). VAT can contribute to fiscal stability and public investment in infrastructure, which are favourable conditions for FDI (Bird & Gendron, 2007). VAT systems

based on the credit-invoice method provide a clear audit trail, potentially reducing opportunities for corruption and improving the investment climate (Ebrill et al., 2001). The administrative burden of VAT compliance can be significant, particularly in countries with weak institutional capacity (Cnossen, 1998). In countries where VAT is levied on capital goods without timely input credits, the cost of investment may rise, discouraging FDI (Klemm & Van Parys, 2012). Exemptions and differential rates can create distortions that affect certain sectors more heavily than others, influencing the sectoral composition of FDI (Ebrill et al., 2001).

Government in the process of trying to encourage more foreign direct investors may introduce some VAT incentives which may come in the form of no payment of VAT on some goods to encourage the consumption of that particular goods then encourage foreign investors to invest in that particular sector e.g no VAT on drug consumption in Nigeria.

Value Added Tax (VAT) incentives are fiscal measures designed to encourage specific economic activities, stimulate investment, and promote consumer spending (Alade & Elosiuba, 2024). VAT is a consumption tax levied on the value added to goods and services at each stage of production or distribution. While VAT is typically a significant source of revenue for governments, certain incentives can be implemented to enhance its effectiveness and support economic growth (Olaniyi et al., 2018).VAT incentives include exempting certain goods from VAT. Such goods are basic food items, healthcare services, and education**;** Reduced VAT rates**;** Zero-rated supplies; VAT refund**s** and Incentives for investment (Bweseh, 2021).

VAT incentives could have several positive effects on the economy which includes encouraging consumption by reducing the tax burden on essential goods and services and they stimulate consumer spending, which is vital for economic growth. They attract both domestic and foreign investment by lowering the overall cost of doing business**;** Supporting export

competitiveness i.e zero-rating exports ensures that domestic products remain competitive in international market to boost trade and economic growth; fostering economic development by targeting specific sectors then promote economic development in areas such as renewable energy, technology, and tourism, contributing to job creation and innovation (Bweseh, et al.,2021). VAT incentives can be beneficial and also come with some challenges which are significant revenue losses for governments, complicate the tax system that could be challenging for businesses to comply, which increases administrative costs and potential tax evasion, inequity issues and potential abuse (Karimi & Wanjohi, 2024).

Value Added Tax incentives can play a significant role in promoting economic growth, encouraging investment, and supporting consumer spending and then increase the revenue generated from such goods because of high consumption (Karimi & Wanjohi, 2024). By carefully designing and implementing VAT incentives, governments can create a more favorable business environment while ensuring that public finances remain sustainable. A balanced approach that considers the potential benefits and challenges of VAT incentives is essential for achieving long-term economic objectives (Karimi & Wanjohi, 2024).

Adegbite and Akande (2017) examined the impact of Value Added Tax (VAT) on private investment in Nigeria using the Pearson Product Moment Correlation and Multiple Regression analysis techniques. Their findings indicated a positive relationship between VAT and private investment within the country. Similarly, Amuka and Ezeudeka (2017) explored whether the introduction of tax incentive schemes could significantly influence the pattern of foreign direct investment (FDI) inflows into Nigeria's non-oil sector. In their study, tax incentives were defined in terms of companies' payroll tax and pension allowances. Utilizing secondary data and

applying the Ordinary Least Squares (OLS) regression method, the study revealed that implementing tax incentive schemes significantly altered the flow of FDI in the non-oil sector. This suggests that tax incentives can serve as an effective policy tool for attracting FDI into Nigeria's non-oil industry.

2.5.5 Moderating Variable of Tax Incentives

- ***Tax Concession and FDI***

Tax concessions are among the most widely used fiscal policy tools by governments to attract Foreign Direct Investment (FDI) (Oruwari, 2022). In an increasingly competitive global investment environment, countries especially developing and emerging economies offer various tax incentives to reduce the tax burden on foreign investors and improve their after tax returns (Adebisi, 2020). While tax concessions can stimulate investment inflows, their effectiveness depends on design, administration, and the broader investment climate (Adebisi, 2020).

Tax concessions are defined as preferential tax treatment for certain types of firms or entities are commonplace in developed as well as developing countries (Appiah-Kubi et al., 2021). Tax Concessions are granted to promote investment, in which case they may be termed tax incentives or investment incentives, or to achieve defined social objectives (Chai & Goyal, 2004). Tax concessions are widely used by governments to attract foreign direct investment (FDI), offering a more favourable tax treatment than the general regime to induce capital inflows (Abille et al, 2020). These incentives aim to boost economic growth, create jobs, and facilitate technology transfer, but their effectiveness is debated and often depends on a country's overall investment climate (Abille et al, 2020).

Tax concessions could be broadly categorized into cost-based and profit-based incentives which includes tax holidays, reduced corporate income tax (CIT) rates, accelerated

depreciation/capital allowances, import duty/tariff exemptions, special economic zones (SEZS) (Abille et al, 2020). Tax concessions could also be referred to as deliberate reductions, exemptions, or deferments of tax liabilities granted by governments to specific sectors, activities, or investors to encourage desired economic behaviour and their common forms includes; Tax holidays, Reduced corporate income tax rates, Investment allowances, tax credits, Accelerated depreciation, Exemptions from withholding taxes, customs duties, or VAT (Abdurahman et al,2021).

The relationship between tax concessions and FDI is complex and yields mixed results in empirical studies (Appiah-Kubiet al., 2021). On the positive side some researches indicates that tax incentives, particularly when well-structured and combined with a stable business environment, can have a positive and significant impact on FDI inflows Abille et al, 2020, while other studies, including those by the IMF and OECD, suggest that a country's fundamental economic characteristics (political stability, infrastructure, market size, and overall skilled labor availability) are more critical to attracting FDI than tax incentives alone(Abdurahman et al,2021). Tax incentives might only be a deciding factor when all other investment conditions between potential host countries are substantially equal (Abdurahman et al, 2021). Tax concessions play a significant role in influencing FDI by reducing investment costs, improving profitability, and enhancing location attractiveness and their impact is neither automatic nor uniform (Abdurahman et al.,2021). A well designed and targeted tax concession (tax incentives) can attract sustainable FDI and promote economic development, and poorly designed concessions may lead to revenue losses, inefficiencies, and short-term investments (Atolagbe & Abiodun, 2022). Therefore, tax concessions should be strategically integrated into a

broader investment and development policy framework rather than used as a standalone tool for attracting FDI (Appiah-Kubi et al., 2021).

2.5.6 Control Variables

❖ ***Corruption and FDI***

Corruption has been long considered one of the greatest obstacles to economic and social development (Jettin et al., 2024).The pervasive corruption in Nigeria has been identified as the root cause of political instability, ethnic and religious conflicts, insecurity, poor infrastructure, high rate of poverty, low human development index, inability of the country to attract the much needed FDI inflow and abysmal economic performance (Karimi & Wanjohi, 2024).The relationship between corruption and FDI has been extensively examined by a large number of economists with the objective of determining if corruption has a negative effect on or at least a correlation with FDI or not (Jettin et al., 2024). The substantive arguments used by most economists regarding corruption are not based on ethics or moral criteria but rather on efficiency (Abotsi, 2018). Does corruption help the market economy to work better, or does it create inefficiencies? This narrow view explains why in the 1960s some writers defended the argument that corruption can help promote development by getting around inefficiencies in bureaucracy (Abotsi, 2018).

The importance given to bureaucracy is justified not only by those who think that the state is always the source of the problem but also because the early studies on corruption focused on developing countries, where it was believed that the state was more inefficient and more prone to corruption or cronyism (Jettin et al., 2024). Despite the central role given to bureaucracy, not all economic studies on corruption actually check whether it is really the main cause of corruption, with a few exceptions (Jettin et al., 2024). Mungiu-Pippidi and Fazekas (2020) find a

negative effect of the administrative burden on corruption. The empirical studies on the relationship between FDI and corruption have lately embraced a growing number of variables, taking into account various macro-economic and socio-institutional variables such as those we have listed above.

It appears that empirically, at the macro-level, the majority of studies find evidence that corruption does have an adverse effect on growth and development, and this effect is larger among lower-income countries (Habib & Zurawicki, 2002). Very few have found a positive effect of corruption on FDI (Habib & Zurawicki, 2002).This growing literature on the adverse effect of corruption explains why many international organizations decided to promote new international agreements to better coordinate the fight against corruption, such as the United Nations Convention Against Corruption (open for signature in 2003, and very widely ratified) and the 1997 OECD Convention on Combating Bribery of Foreign Officials in International Business (Jettin et al., 2024). However, looking back, these broad treaties have been found not to have been very effective, as measured for example by survey and case study evidence (Jettin et al., 2024). One of the reasons may be that corruption operates also at a regional level, so a regional coordination of the fight against corruption may be more effective (Jettin et al., 2024). Corruption should be treated based on logical legal proceedings that neither threaten the security of international investors nor encroach on their freedom and rights which are the real stimulants of FDI in West Africa rather than low corruption (Emediegwu & Edo, 2017).

The governments in Nigeria and other West Africa Countries have a vital role to play in attracting foreign investors by developing and maintaining strong and dependable legal and financial frameworks that would expedite actions for potential investors and secure their property and civil rights is very imperative (Bekoe, etal., 2021). Moreover, to draw more FDI into the sub

region for the sake of its economic prosperity and progress, political institutions must ensure they are committed to some considerable level of policy consistency as well as maintain the required policy flexibility that will create an economic and political environments which multinational corporations (MNCs) desire (Emediegwu & Edo, 2017).

- ***Exchange Rate and FDI***

Exchange rates, which represent the domestic currency's value relative to a foreign currency, are significant both in terms of their absolute levels and their volatility. Fluctuations in exchange rates can affect not only the overall volume of foreign direct investment (FDI) but also how such investments are distributed across different countries (Adewale et al., 2024). The role of FDI from a decision-making standpoint has largely been examined within a microeconomic framework (Bweseh, 2021). In this regard, Adewale et al. (2024) considered the behaviour of risk-averse investors who evaluate whether or not to commit capital to a particular country.

Basically, the Exchange Rate (ER) is a variable in the process that can either benefit or worse the chances of a host country to be chosen but, in general, most of the literature has focused on analysing how ER and the ER variability affect the decision of carrying FDI into a country (Adewale et al., 2024). If the investor wishes to serve the local market, FDI and trade are substitutes and the relationship is as follows: an appreciation of the currency increases FDI inflows due to higher purchasing power of the local consumers; on the other hand, a depreciation might as well increase FDI since it increases the relative wealth of foreign firms and hence their capacity to invest (through the reduced cost of capital)(Adewale et al., 2024). If FDI aims at producing for re-export, it complements trade, then an appreciation of the local currency reduces FDI inflows through lower competitiveness due to high labour costs while depreciation increases wealth of foreign investors and stimulate agents demand for investment (Ruiz, 20O5).

Adewale et al. (2024) examined the relationship between exchange rates and Foreign Direct Investment (FDI) in Nigeria over the period from 1981-2021. Using the Fully Modified Ordinary Least Squares (FMOLS) estimation technique, the study found a significant positive relationship between exchange rates and FDI inflows. However, trade openness, while positively related to FDI, did not exhibit statistical significance. The coefficient of interest rates (INTR = -0.104) indicated a negative but insignificant effect on FDI, while inflation rates (INFR = 0.012) showed a positive yet statistically insignificant relationship. Interestingly, human capital (HC coefficient = -77.787) displayed a strong and statistically significant negative association with FDI, emphasizing the crucial role of human capital development in attracting foreign investors. Overall, the findings underscore that exchange rate movements substantially influence FDI in Nigeria, and the study recommends that policymakers adopt prudent exchange rate management and pursue broader macroeconomic stability to create a more favourable investment climate.

Similarly, Ruiz (2005) explored the influence of exchange rates as a determinant of FDI, extending the analysis to consider how exchange rate fluctuations affect investment decisions depending on whether firms seek to serve domestic markets or establish export-oriented operations. The study provided a comprehensive review of empirical research to assess the true significance of exchange rate dynamics in shaping FDI patterns. Using data from Latin America, Ruiz described regional FDI behaviour and proposed a conceptual model for understanding how exchange rate conditions impact foreign investment decisions across countries.

2.6 Review of Theories

2.6.1 Normative Theory

The Normative Theory was originally introduced by Fred Siebert, Theodore Peterson, and Wilbur Schramm in 1969 through their seminar work *"Four Theories of the Press"* (Karimu & Wanjohi, 2024). The term first gained prominence in the United States during the Cold War era, particularly amid ideological tensions with communist and Soviet systems. The theory explains how the evolution of governmental structures creates a set of incentives and constraints that shape the actions of governments and other key actors (Cochran, 1999). These incentives, in turn, influence the trajectory of institutional and policy development leading different governments to adopt varied, and not always efficient, approaches to governance. Consequently, the formulation of tax policies and the implementation of administrative reforms often occur simultaneously and are interdependent processes.

Institutional theory, which complements this perspective, provides a comprehensive framework for understanding the evolution of tax policies and administrative systems across different historical periods and cultural contexts. It serves as a valuable model for describing, explaining, and predicting government behaviour and policy outcomes (Karimu & Wanjohi, 2024).

Building on this foundation, Chua (1995) argues that every incentive entails both advantages and disadvantages, making it difficult to design a universally effective set of incentives suitable for diverse economies facing unique challenges. The success of such incentives depends largely on factors such as prevailing economic conditions, the efficiency of tax administration, the nature of the targeted investment, and the fiscal capacity of the government to promote investments in specific sectors or regions while minimizing revenue losses and opportunities for tax evasion.

2.6.2 Tax Discrimination Theory

Tax Discriminatory Theory was a premise developed by Glaeser (2001).The tax discriminatory theory posits that governments impose varying tax charges depending on the type and location of an investment. According to the theory, the amount of tax levied is influenced by the government's desire to encourage businesses to establish operations in specific areas. Firms located at the geographical margins are often the primary beneficiaries of such tax incentives. To stimulate investment in underdeveloped or growth-potential regions rather than in already developed urban centres governments may offer tax holidays and reduced tax rates.

Mason (2006) further observed that both citizens and non-citizens within the same jurisdiction can experience different tax treatments as a result of tax discrimination. For instance, under Kenyan tax law, capital allowances are granted to taxable entities that invest in capital-intensive projects, such as manufacturing firms. As noted by the Government of Kenya (GOK, 2012), a 100% capital allowance is available to manufacturing firms with capital expenditures exceeding 200 million Kenyan shillings, while investors located outside Nairobi qualify for an enhanced 150% capital allowance. This regional differentiation illustrates how tax benefits can vary by location. Consequently, when similar taxes are imposed differently across regions, it constitutes tax discrimination.

2.6.3 Laffer Curve Theory

The Laffer Curve Theory, introduced by economist Arthur B. Laffer in 1979, builds on the earlier works of John Maynard Keynes and Ibn Khaldun (Laffer, 2004). The theory suggests that tax revenue responds to changes in tax rates. Specifically, increasing tax rates beyond a certain point reduces total revenue, while lowering tax rates can enhance revenue collection.

Keynes argued that lowering tax rates achieves the objectives of taxation, whereas higher rates tend to undermine them (Karimi & Wanjohi, 2024).

The theory identifies two main effects of tax rate changes arithmetic and economic effects (Karimu & Wanjohi, 2024). The arithmetic effect assumes a direct relationship between tax rates and revenue: higher rates yield more tax income, while lower rates generate less. Conversely, the economic effect suggests that higher tax rates discourage productivity and investment, leading to lower overall revenue. Liapis (2015) supports this view, noting that excessive taxation reduces worker motivation and output, while lower taxes enhance productivity. Hence, there exists an optimal tax rate beyond which productivity declines and revenue falls. Furthermore, taxpayers are more willing to comply with tax obligations when offered meaningful tax incentives (Karimi & Wanjohi, 2024).

2.6.4 Optimal Tax Theory

The Optimal Tax Theory, first introduced by Mirrlees (1976), provides the conceptual framework for designing tax systems that minimize economic inefficiencies while achieving desired revenue goals (Karimi & Wanjohi, 2024). The theory suggests that a “neutral” tax system is one that exerts minimal influence on individual and business decision ideal. However, in practice, taxes inevitably shape economic behaviour and can lead to market distortions.

A key insight of the theory is that differential taxation across activities may prompt individuals and firms to favour those with lower tax burdens or special incentives. For example, individuals might prefer leisure or home production over market activities that are taxed, or consumers may alter spending behaviour when goods and services are taxed at different rates (Karimi & Wanjohi, 2024).

Building on this, Ramsey (1927) advanced the theory by proposing the application of demand elasticity to determine optimal commodity taxes. He argued that products with less elastic demand should be taxed more heavily, as this minimizes deadweight losses and economic distortions (Karimu & Wanjohi, 2024). Over time, optimal tax theory has evolved to focus on assessing marginal deadweight loss as a measure of tax policy efficiency, emphasizing the balance between revenue generation and economic welfare (Karimi & Wanjohi, 2024).

2.7 Empirical Reviews

Eneche and Sukana (2025) investigated the effect of fiscal policy on foreign direct investment in Nigeria by this study. Auto-regressive Distributed Lag Model estimation techniques is used to analyse the time series data from 1990 - 2024, sourced from Nigerian Bureau of Statistics (NBS). Findings revealed that government tax revenue had a significant positive influence on foreign direct investment. Inflation has positive but insignificant influence on foreign direct investment, and exchange rate also has a positive and insignificant influence on foreign direct investment. The study therefore recommends that government should adopt friendly fiscal policies such as increased granting of tax incentive in the form of pioneer status (particularly, to companies investing into new areas or areas not fully developed), investment tax allowance, double taxation agreement, research, and development tax allowance among others. Inflation rate should be controlled and sustained at a rate not more than one digit to eliminate uncertainty and encourage prediction of business activities. Exchange rate, removal of central bank controls on foreign exchange so as to reduce the premium between official exchange rate and parallel exchange rate should be given the desired push and support.

Nwankwo and Okoro (2025) investigated the effect of tax incentives on foreign direct investment in Nigeria. The specific objectives were to examine the effect of investment tax allowance, tax holiday, reduced corporate tax rate, and gas utilization incentives on the foreign direct investment in Nigeria. Secondary sources of data were employed and relevant data were sourced from Central Bank of Nigeria's (CBN) Statistical Bulletin, Federal Inland Revenue services (FIRS)statistics, Nigeria Bureau of Statistics (NBS), Nigeria investment promotion council (NIPC).Federal Ministry of Trade and Investment (FMTI), and World Bank Data Card (WBDC) from1992-2022. The variables were foreign direct investment as the dependent variables while investment tax allowance, tax holiday, reduced corporate tax rate, and gas utilization incentives were independent variables. Auto Regression Distributed Lag (ARDL) method of data analysis was used, descriptive statistics, correlation and regression analysis were employed. The study found that Investment tax allowance had a significant long run and short run effects on foreign direct investment in Nigeria. Tax holiday incentive had an insignificant long run effect and has significant effect on short run effects on foreign direct investment in Nigeria. Reduced corporate tax has a significant long run and short run effects on foreign direct investment in Nigeria. The study conclude that A combined management of investment tax allowance, tax holiday incentive, reduced corporate tax and gas utilization incentive had a significant long run and short run effects on the foreign direct investment in Nigeria. It was recommended that the tax authority should introduce a policy of carrying over Investment tax allowance that was not utilized in the current year to the subsequent year as an additional incentive to the investors, monitoring and evaluating the impact of these incentive over time was crucial for informed policy adjustment.

Ogbonaya et al. (2025) investigated the impact of Company Income Tax (CIT) policies on Foreign Direct Investment (FDI) in Nigeria over 34 years (1990-2023). The ex-post facto design was adopted, and annual time series data was sourced from the Central Bank of Nigeria's (CBN) statistical bulletin, Federal Inland Revenue Service (FIRS), and the World Bank published statements. Employing both short-run and long-run Autoregressive Distributed Lag (ARDL) models, the study provided a comprehensive empirical analysis of the CIT-FDI nexus and found that on the long run, CIT rate, GDP growth, inflation, unemployment, and exchange rates significantly influenced FDI. In the short run, GDP growth, interest rate, government capital expenditure, and inflation fluctuations emerged as critical determinants. The study concluded that while CIT policies matter for FDI, their effectiveness was conditional on broader macroeconomic and institutional contexts and while CIT policy exerted a statistically significant influence on long-term FDI inflows, its efficacy was contingent upon broader macroeconomic stability and institutional coherence. A competitive and predictable corporate tax regime that was complemented by infrastructure development, monetary stability, and regulatory transparency was imperative for positioning Nigeria as an attractive destination for sustainable foreign investment. The study recommended periodic reforms to the CIT framework, reduction of tax rates to match regional benchmarks, and the creation of a stable, investor-friendly environment through infrastructural development and regulatory clarity. These insights provided strategic direction for policymakers aiming to enhance Nigeria's investment climate and optimize tax revenues through sustainable FDI inflows.

Ferguson et al. (2025) investigated the impact of tax administration quality on Foreign Direct investment (FDI) in developing countries. Developing countries are improving tax administration to raise revenue and reduce dependence on foreign aid. These reforms may deter

FDI by raising taxes or attract it by creating a more transparent and predictable investment environment and use participation in Tax Inspectors without Borders, a joint OECD-UN program that helps developing countries audit and tax multinational corporations (MNCs) as a proxy for improved tax administration. They found that tax administration quality was positively related to FDI. Heterogeneity tests demonstrated that tax administration quality attracted FDI by curbing corruption by tax authorities, reducing tax uncertainty, and mitigating agency problems. A falsification test using foreign portfolio investment, which was less affected by changes targeting foreign MNCs, supported our inferences which have important policy implications as developing countries continue to consider improvements to tax administration capacity.

Ubahi et al. (2025) investigated the effect of tax incentive on Foreign Direct Investment (FDI) in Nigeria from 1995-2024. Given the significance of FDI to economic growth and the use of tax incentives as a strategy among governments of various countries to attract FDI, this study examines the impact of tax incentives in the decision of an investor to locate FDI in Nigeria. Export expansion grant and Gas utilization incentive were chosen as variables for the study. Data were drawn from annual statistical bulletin of the Central Bank of Nigeria and the World Bank World Development Indicators Database. The work employs a model of multiple regressions using static Error Correction Modelling (ECM) technique to determine the time series properties of tax incentives captured by annual tax revenue as a percentage of Gross Domestic Product (GDP) and FDI and found that the tax incentives in Nigeria had a beneficial impact on the foreign direct investment in the country which showed that an increase or decrease in the tax incentive variables had a significant effect on the foreign direct investment in Nigeria. A combined management of export expansion grants and gas utilization incentive had a significant effect on the foreign direct investment in Nigeria. Based on the findings, the study recommended

among others that the application and approval processes for the export expansion grant and GUI should be more simplified, transparent and clearly defined. The accelerated tax incentive should be targeted at industries that have high potential for growth and job creation, such as renewable energy, information technology, or healthcare.

Kubaje et al. (2025) investigated the effects of Foreign Direct Investments (FDIs) on economic growth while giving little significance to domestic resource mobilization in the form of taxes as a player in economic growth. This study contributes to literature in two unique ways: first, investigating the effects of FDIs and tax revenue on economic growth. Second, it examines the threshold of taxes that enhance economic growth. By using a fixed effect model, the study found that foreign direct investments significantly influenced economic growth but tax revenue as a share of GDP did not. However, using dynamic threshold model, we found that tax revenue had an insignificant effect on economic growth because the average tax rate of the sampled countries fell below a level of taxes significant enough to stimulate economic growth. Again, the model indicated that below 15% of tax rate, economic growth was positively influenced by tax revenue but beyond this threshold, taxes became detrimental to economic growth. As a robustness check, the 43 sampled countries were grouped into Central African countries (CA), Eastern African countries (EA), Northern African countries (NA), Southern African countries (SA), and Western African countries (WA). Given the findings, it is recommended that developing countries in Africa not only rely on foreign direct investments but also strengthen their tax systems which will then serve as a complement to FDIs in the economic growth of the country.

Zeng et al. (2025) investigated the influence of tax incentives on the development of new energy vehicles. The study used data from A-share listed new energy automotive corporations

from 2010 to 2022 and the two-way fixed effect model was used and found that tax incentives had a significant promotion effect on the performance of new energy automobile enterprises and had the most significant impact on their operational capacity. it could improve the performance of new energy automobile enterprises by alleviating financing constraints. The incentive effect of tax incentives on the performance of new energy car firms was more substantial in the eastern region, but the effect on the central and western regions was unclear and the promotion effect had long-term, sustained effects.

Akam et al. (2023) investigated tax incentives and foreign direct investment of listed oil and gas companies in Nigeria. To achieve the purpose of the study, two (2) hypothetical statements were formulated for the study and relevant literature reviewed. The cross- sectional survey research method was adopted for the study on a population that comprised of eleven listed oil and gas companies in Nigerian Stock Exchange as at January 2020. Eleven listed oil and gas companies (11) were obtained as the study's sample size, and 4-point likert-scale questionnaires administered on the Unit Heads of accounting, marketing, production and customer service and their Assistants as a major instrument for data collection. Subsequently, the simple random sampling technique was adopted and thirty (30) management staff were drawn from each of the companies and from the identified departments of the company under study, to arrive at 330 management staff for the whole sample, of which 202 copies of the questionnaire were returned, obtaining a 67.3 percent response rate. Analyses were performed by means of descriptive statistics and simple regressions, using Statistical Package for Social Sciences (SPSS) Version 22.0. The study found that capital allowance had a positive and moderate effect on foreign direct investment, while investment tax allowance had a weak, positive and insignificant effect on foreign direct investment and concluded that, tax incentives through capital allowance

significantly and positively influenced foreign direct investment, but through investment tax allowance insignificantly and positively influenced foreign direct investment of listed oil and gas companies in Nigeria. The study recommended that Nigerian government should not dwell much on using investment tax allowance to promote or attract foreign direct investment. That is, those listed oil and gas companies that undertake the same production activities in multiple countries or they can out rightly reduce investment tax allowance for listed oil and gas companies in Nigeria that operate on foreign direct investment. Since there is weak and insignificant effect of investment tax allowance on foreign direct investment, they should maintain or improve on capital allowance to attract foreign direct investment since there is a positive and significant effect.

Kusumaningtyas and Kalimanzila (2023) investigated the Impact of tax Incentive on Increase Foreign Direct Investment. The study examined and described the effect of applying tax incentives through the tax allowance policy on the growth of direct investment in Indonesia and employed Legal research method of inquiry. Legal issues were analyzed using doctrinal research to draw logical conclusions. Legal research enhanced the quality of research projects. The application of tax incentives had resulted in an increase in total investment of 187%, and the number of recipients of tax incentives had increased from 69 to 71 and continued to grow annually. Additionally, the incentives had a positive effect on other nations. Several obstacles and barriers existed in its implementation, including inefficiency in the government system, political relations with businesses, and economic stability.

Oruwari (2022) investigated tax policy and foreign direct investment inflows in Nigeria through the influence of company income tax, value added tax, customs and excise duties and petroleum profit tax. Using quasi experimental research design, data was sorted from secondary

sources such as journals and Nigeria statistical bulletin, for an ordinary least square regression analysis to estimate the models. Based on the analysis of the results of the estimated models, the study found that custom and excise duty and its lag exhibited positive relationship with foreign direct investment. Also, that company income tax and its lag by one year indicated a positive relationship with foreign direct investment in Nigeria. For petroleum profit tax and value added tax, there was a negative relationship with foreign direct investment. In addition, it indicated that apart from customs and excise duty, the other components of taxation were not statistically significant with foreign direct investment and income taxes were duly related with lower economic growth than taxes on consumption and properties and emphasized the support for ranking of tax instruments in respect of their relationships with economic growth. In this regard, the study recommends that the government adopt more of explanatory fiscal policy measures to boost foreign direct investment in Nigeria.

Gaspareniene et al. (2022) investigated the impact of FDI on tax revenue and focused on the European Union (EU) economy. An empirical analysis was conducted to determine the relationship between inward and outward FDI and tax revenue by employing data on EU countries between 1999 and 2019. The data were extracted from the United Nations Conference for Trade and Development (UNCTAD) database and the World Development Indicators database (WDI) of the World Bank and econometric model was developed. The research methods were systematic and comparative analysis of scientific literature, panel data analysis, and multiple regression analysis. The regression analysis was based on the least-squares method, and the estimates of the econometric models were calculated by identifying robust heteroscedasticity consistent standard errors. The study found that the outward FDI had a significant stimulating impact on total tax revenue. In contrast, inward FDI had a dampening

effect on tax revenue. The analysis of the lagging effect of FDI on tax revenue in the EU member states revealed a statistically significant lagging impact of the outward FDI made two years before. The estimations indicated that the lagging effect was an incentive. No statistically significant lagging effect of the inward FDI flows on tax revenue was found.

Appiah-Kubi et al. (2021) investigated the influence of tax incentives on foreign direct investment in African economies based on data from 2000-2018. The study utilized panel data on forty (40) African countries and an econometric model of four proxies of tax incentives, after controlling other variables, with robust Random Effect as our discussion estimator. Our results revealed that FDI responds to lower corporate income tax (CTR). Furthermore, foreign direct investment predominates in African economies with longer tax holidays and withholding tax. However, tax concession is insignificant to the inflows of FDIs in Africa and recommends that without proper restructuring of the tax incentives to deal with policy lapses by the governments of Africa, achieving the four main goals, i.e., poverty eradication, sustainable growth and development, African integration in the competitive global economy, and women empowerment, will be hindered.

Olowo et al. (2020) investigated the impact of tax incentives on the growth and development of manufacturing firms in Nigeria using an ex post facto research design. Secondary data covering 2013-2018 on corporate income tax, capital allowance, customs duty, and excise tax incentives were analyzed using multiple regression via E-Views 9.0. Results showed that all tax incentive variables had positive and significant effects on firms' return on assets. The study concluded that tax incentives are crucial for industrial growth and recommended regular cost-benefit analyses to ensure that incentive schemes achieved their intended objectives.

Joseph et al. (2019) investigated the impact of tax revenue on economic growth of Nigeria proxied as gross domestic product (GDP) from 2000-2017. The study employed Exploratory and ex-post facto designs and secondary data sourced from Federal Inland Revenue Services (FIRS), UNCTAD, FDI/MNE database, World Bank Report, United Nations Development Programme (UNDP) reports, CBN statistical bulletin. Ordinary Least Squares (OLS) regression technique was adopted to test the hypotheses of the study. The result revealed that tax revenue had significant impact on GDP in Nigeria with R-squared showing that about 87% variations in GDP can be attributed to tax revenue, while the remaining 23% variations in GDP are caused by other factors not included in this model. This is further emphasized by the T-statistic p-value of 0.001 which shows that the regression result is statistically significant because it is less than 5%, level of significance adopted for this study. The result from regression analysis also revealed that there is positive relationship between foreign direct investment and Gross Domestic Product, with a p-value of +0.000, +0.001 < 0.05% significance level. The study concluded that tax revenue had a significant impact on GDP in Nigeria; there is a positive relationship between FDI and economic growth in Nigeria; therefore, the more FDI increases more economic growth. The study recommended that functional tax structures that would ensure that tax is collected from all taxable individuals, group of individuals and corporate bodies and remitted accordingly to the government without diversion should be instituted to widen the revenue base of the country. Government should liberalize the Nigerian economy more by removing all barriers to trade such as arbitrary tariffs, import and export duties and other levies to encourage foreign investors.

Raphael et al. (2019) investigated the relationship between tax policy incentives and FDI in Nigeria over a 19-year period (1999-2017). Using multiple regression models based on

secondary data from the Central Bank of Nigeria and World Bank. The study found that while cost-based tax incentives had a stronger explanatory effect ($R^2 = 0.230$) compared to profit-based incentives ($R^2 = 0.045$), neither had a statistically significant impact on FDI inflows. The researchers recommended the adoption of complementary non-tax incentive strategies to enhance FDI attraction and retention.

Patrick (2019) examined the role of tax incentives in attracting FDI to developing countries, with a focus on Ghana and Kenya. Despite their widespread use in sub-Saharan Africa, the study found that tax incentives were poorly structured and administered, limiting their effectiveness. The author argued that excessive dependence on tax incentives undermined domestic revenue mobilization, posing challenges to sustainable development. Legislative and administrative reforms were recommended to improve the design and efficiency of such incentives.

Ugwu and Okoye (2018) investigated the contribution of tax incentives towards FDI inflow into Nigeria, Ghana and South Africa as well as the effect of such FDI inflows on those countries' exports after their adoption of IFRS for the period 1999-2015. Ex-post- facto research design was adopted for the study. Secondary data were collected and analyzed using descriptive and inferential statistics and found a positive association between tax incentives and FDI and that FDI had no significant effect on the exports of Nigeria, Ghana and South Africa. There was also, no significant difference in the effect of FDI on exports of all the countries of study in their pre- and post-IFRS adoption periods. This implies that the more corporate tax rate is reduced, as well as increased in other tax incentives, the more FDI inflow into those countries and when significant level of FDI inflow have been achieved, the effect on export would become significant. The study recommends that governments of the three countries of study should

improve and sustain more tax incentives as that would help in the attraction of the much-needed FDI in export-oriented industries to enhance economic growth and development.

Olaniyi et al. (2018) investigated tax policy incentives and foreign direct investment in Nigeria and focused on the impact of company income tax incentives, petroleum profit tax incentives, value added tax incentives, and custom and excise duties incentives on inflow of foreign direct investment into the country from 1994 to 2016. This study adopted ex-post facto research design, while multiple regression and correlation methods were used to analyze the secondary data obtained from Central Bank of Nigeria database. The study found that custom and excise duties and value added tax incentives had significant effects (Coef = -2.096 and 4.247, p-values=0.0233, 0.0125) respectively on foreign direct investment in the country, while companies' income tax and petroleum profit tax incentives showed insignificant impact (Coeff = -1.514 and 2.749 percent; p-values=0.1510, 0.7375) respectively on foreign direct investment in Nigeria. The study concluded that tax incentive policy is a good driver of foreign direct investment into Nigerian economy. It was recommended among other things that the government should find the justifiable level of the VAT and custom duty to be paid by importers of foreign materials that will yield the maximum level of FDI into the country.

Arzizeh et al. (2018) focused on the effect of tax incentives on FDI in Nigeria's petroleum sector. The study observed that, despite limited tax incentives in the industry due to perceptions of its profitability, high tax rates, multiple levies, and complex tax systems hindered its growth. Employing an ex post facto design and regression analysis, the results revealed that investment tax allowances, capital allowances, and non-productive rent significantly influenced FDI inflows. The study concluded that tax incentives promoted job creation, improved living standards, and expanded consumer choices. It recommended eliminating double taxation,

effectively implementing incentive policies, and improving investment conditions through better infrastructure and policy frameworks.

George and Bariyima (2015) explored the relationship between tax policy and foreign direct investment in Nigeria. Recognizing the importance of FDI for economic growth, the study employed multiple regression and an Error Correction Model (ECM) using data from the Central Bank of Nigeria and World Bank databases. Findings showed a negative and significant relationship between tax incentives and FDI inflows, implying that higher tax incentives did not necessarily lead to increased FDI. The study recommended that reliance on tax incentives be reduced and that more attention be given to macroeconomic and political stability as alternative investment drivers.

Pham (2015) examined the effect of corporate income tax on the economic performance of small and medium-sized enterprises (SMEs), with similar findings to those reported by Assidi et al. (2016) in Tunisia. Focusing on a 30% tax rate reduction for SMEs in 2009 (for firms with at least $5,000 capital and 300 employees), Pham found that lowering income tax rates enhanced profitability and financial health, while attracting multinational companies to invest.

Ohaka and Dagogo (2015) examined how tax incentives particularly customs duty exemptions, affected the financial well-being of manufacturing firms. The research covered 60 listed manufacturing firms using both secondary data from the Nigerian Stock Exchange and primary data obtained through questionnaires. Results showed that customs duty incentives had a positive impact on the economic performance of manufacturing firms. The authors recommended broader application of such incentives to enhance firms' financial strength.

Amariati (2013) explored factors affecting the financial performance of listed manufacturing firms in Kenya. Findings revealed that the prevailing tax regime significantly influenced firm performance. Most respondents noted that high taxation increases commodity prices, thereby reducing competitiveness. Specifically, high import and input taxes elevated production costs and constrained productivity. The study concluded that customs duty incentives played a crucial role in improving firm performance by lowering importation costs for raw materials.

Githaiga (2013) studied the relationship between tax incentives and foreign direct investment (FDI) inflows among listed firms on the Nairobi Stock Exchange between 2008 and 2011. Employing correlation analysis on data from audited financial reports, the study found a strong positive association between wear-and-tear allowances and FDI inflows, while investment deductions and industrial building allowances showed no significant link. However, despite the observed correlation, tax incentives as measured by wear-and-tear allowances did not statistically affect FDI inflows.

Tassie and Akinyomi (2011) investigated the influence of Value Added Tax (VAT) incentives on the financial performance of small-scale industries in Rivers State, Nigeria. The study distributed questionnaires to 260 participants drawn from 11 registered firms selected through simple random sampling. Using chi-square analysis for hypothesis testing and frequency distribution for data analysis, the results revealed a significant positive relationship between VAT incentives and the financial performance of small-scale enterprises. The authors recommended that tax incentives, including VAT reliefs, be periodically reviewed to reflect prevailing economic conditions. Similarly, in a related study on manufacturing firms in Nairobi City County, Kenya, it was suggested that extending dividend tax exemptions and granting

unconditional tax holidays to new small-scale firms could stimulate greater investment. The general recommendation emphasized that all tax incentives, regardless of firm size, should be thoroughly assessed given their potential to influence financial performance.

The Organisation for Economic Co-operation and Development (OECD, 2019) defined double taxation as a situation where the same income is taxed by two different jurisdictions within a specific period, creating a heavy burden on taxpayers and to mitigate this, countries have established double taxation treaties bilateral agreements designed to prevent businesses from being taxed twice on the same income.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlines the methods and procedures employed to carry out the research in line with the stated objectives of the study. It covers the research philosophy, research design, types and sources of data, model specification, operation5alisation of variables, as well as the econometric techniques and analytical tools adopted for data analysis and hypothesis testing.

3.2 Research Approach and Design

In line with the adopted philosophical stance, this study employed a deductive research approach rather than an inductive one. The deductive approach was appropriate for the quantitative nature of the study, as it involved formulating hypotheses derived from established theories and empirically testing them using observed data. This approach was suitable because the study specified econometric models to examine the relationships between tax policy variables and foreign direct investment (FDI) inflows in Nigeria, and subsequently accepted or rejected the hypotheses based on statistical evidence.

In addition, the study adopted a longitudinal research design, which enabled the analysis of trends and relationships over time. This design was appropriate because the study relied on historical time-series data obtained from secondary sources to examine the dynamic short-run relationship between foreign direct investment and tax policy variables in Nigeria over the study period.

3.3 Population and Sample

The population of this study comprised annual time-series data on foreign direct investment and selected tax policy variables in Nigeria covering the period 1994 to 2024 which was based on data availability and policy relevance. The tax policy variables included company income tax, customs and excise duties, petroleum profit tax, value added tax, and tax concessions. Given the time-series nature of the data, the study utilised the full set of available annual observations within the study period, resulting in a sample of 31 years. The choice of the 1994-2024 timeframe was guided by the need to capture major phases of Nigeria's economic and fiscal policy reforms, including the Structural Adjustment Programme (SAP) and the National Economic Empowerment and Development Strategy (NEEDS), as well as to ensure data availability, consistency, and reliability across all variables.

3.4 Sources of Data Collection

This study relied exclusively on secondary data obtained from reputable and publicly accessible institutional databases. The data were extracted from the World Bank's World Development Indicators (WDI), the United Nations Development Programme (UNDP), the National Bureau of Statistics (NBS), and the Central Bank of Nigeria (CBN) Statistical Bulletins. These institutions were selected because they provide standardized, comprehensive, and internationally recognized macroeconomic datasets that are widely used in empirical economic and financial research.

Data extraction was carried out by identifying and downloading annual observations corresponding to the variables specified in the study for the period 1994–2024. Each variable was extracted using consistent definitions and measurement units as provided by the originating

institutions. The extracted datasets were compiled into a single database using Microsoft Excel before being imported into the statistical software for analysis.

Where variations in reported figures were observed across data sources, priority was given to the official Nigerian statistical agencies (CBN and NBS) for country-specific macroeconomic indicators, while the World Bank served as the primary reference source because it harmonizes national statistics using internationally accepted methodologies. Any discrepancies identified were reconciled through cross-validation with the original publications and accompanying metadata. Where revisions had been officially released by the reporting institutions, the most recent revised series was adopted to ensure consistency and accuracy.

To improve data quality, a systematic data cleansing process was undertaken. This involved checking for duplicate observations, transcription errors, and inconsistent units of measurement, missing values, and abnormal observations. Variables reported in different units were converted into comparable measurement scales where necessary. Missing observations were verified against alternative official publications before any decision was made regarding their treatment. Because the selected databases maintain complete annual macroeconomic series for the study period, no artificial imputation of missing values was required. The final dataset was further screened for internal consistency and completeness before econometric estimation.

Regarding base-year adjustments, the study adopted the revised GDP and related macroeconomic series published by the National Bureau of Statistics and the Central Bank of Nigeria, which incorporate the official GDP rebasing exercises implemented during the study period. Consequently, no additional manual base-year adjustment was undertaken by the researcher. All monetary variables were analysed using the officially revised series to ensure comparability over

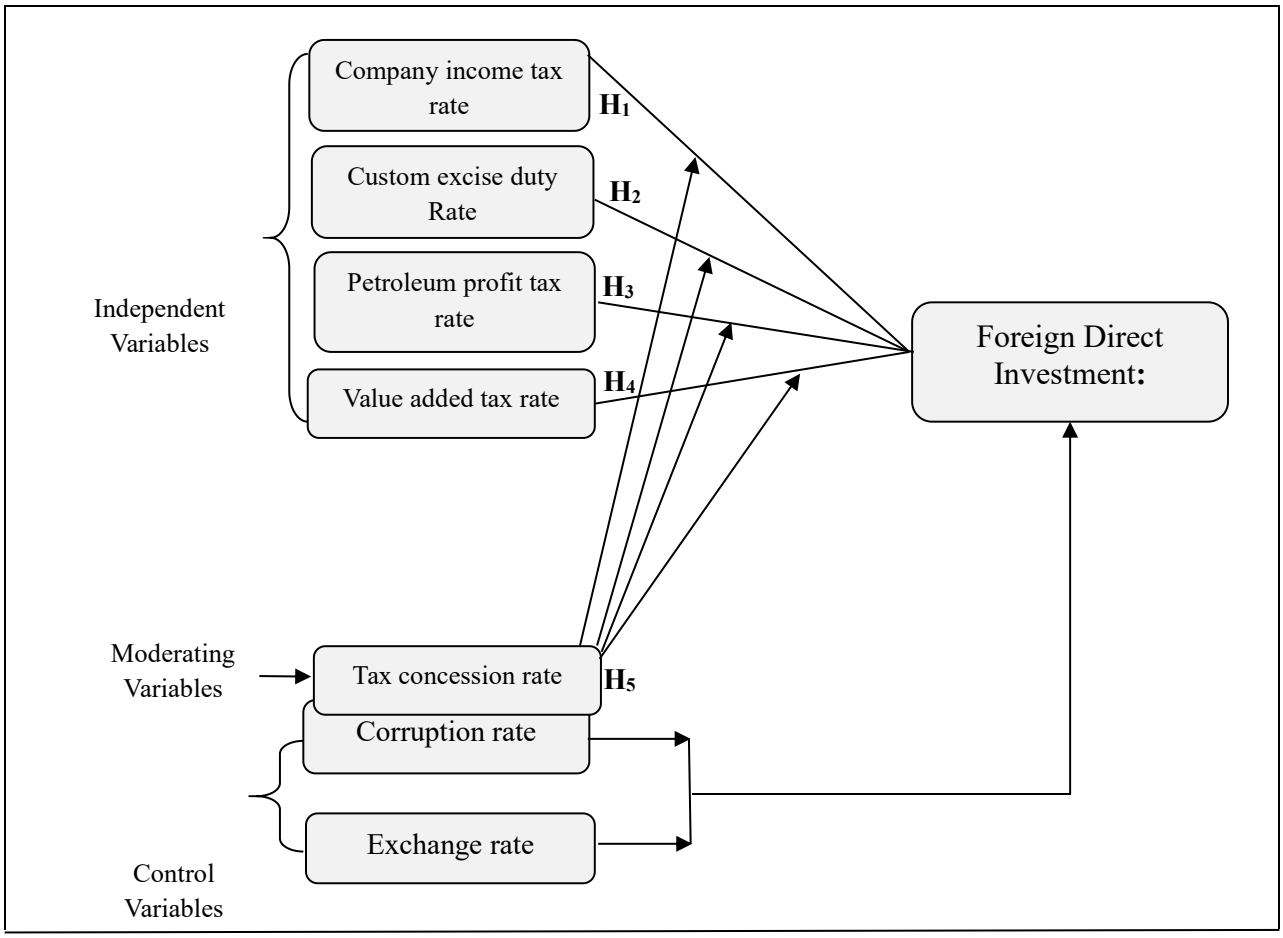
time and consistency with national accounting standards. Where variables originated from the World Bank, the harmonized series reported in the World Development Indicators were used, reflecting any official revisions made by the respective national statistical authorities.

3.5 Research Framework

The conceptual framework of this study is grounded in the Neo-Classical Growth Theory, initially advanced by Solow (1956) and Swan (1956). This theory posits that substantial inflows of foreign capital are necessary to stimulate economic growth and development, which, in turn, can influence tax revenue generation (Effiong & Inyang, 2021; Giwa et al., 2020). The neoclassical model is considered a foundational perspective in foreign direct investment research, as it highlights three critical channels labour, capital, and technology transfer through which FDI benefits host economies. However, the present study contends that the extent of these effects on tax revenue generation may vary across countries due to differences in institutional capacity, policy frameworks, and economic structures.

Flowing from the above deductions, the schematic representation of the research framework of the study, from whence the models are built, is given in Figure 3.1:

Figure 3.1: ***Research Framework***



Source: Researcher's Analytical Framework, 2025.

3.7 Method of Data Analyses

The obtained time series data was analysed using trend analysis and descriptive statistics, while the Auto Regression Distributed Lag (ARDL) was employed as the standard tool in analysing the effects of tax policy and tax incentives on FDI. The ECM specification provide the means by which the short-run observed behaviour of variables is associated with their long-run equilibrium growth paths (Enders, 2004). The ECM estimation framework provides a means of linking the short-run behaviour of variables to their long-run equilibrium growth trajectories (Enders, 2004).

To ensure the reliability and validity of the regression results, several conventional diagnostic tests such as unit root tests, multicollinearity tests, and heteroskedasticity tests will be conducted to address potential violations of key regression assumptions. The unit root test was specifically employed to determine the stationarity of the time series variables (Kilian, 1999). Collectively, these diagnostic procedures will serve as essential tools for guiding the interpretation of results when working with time series data. All statistical analyses were carried out using STATA software (version 19).

3.8 Model Specification

Based on the schematic representation of variables presented in Figure 1 and the adaptation of the models of Oruwari (2022), Atolagbe and Abiodun (2022) and Danjuma (2021), the study specifies short-run dynamic models within the Autoregressive Distributed Lag (ARDL) framework. This approach is appropriate given the mixed order of integration of the variables and the absence of a long-run equilibrium relationship, as established by the unit root and bounds test results. Consequently, the analysis focuses on short-run dynamics using first-differenced logarithmic variables.

There are two models in the study, model 1 (baseline model) examines the direct short-run effects of tax policy variables and tax concessions on FDI inflows, controlling for macroeconomic and institutional factors, while model 2 introduces the interaction terms between tax concessions and each tax policy variables to check whether tax concessions moderate the relationship between tax policy variables and FDI inflows.

Model 1: ***Baseline Short-Run Model (Direct Effects)***

$\Delta lnFDI_t = \alpha_0 + \alpha_1 \Delta lnCIT_t + \alpha_2 \Delta lnCED_t + \alpha_3 \Delta lnPPT_t + \alpha_4 \Delta lnVAT_t + \alpha_5 \Delta lnTAXC_t + \alpha_6 \Delta lnEXR_t + \alpha_7 COR_t + \alpha_8 \Delta lnFDI_{\{t-1\}} + \varepsilon_t$…………………………Equ 3.1

Model 2: ***Moderated Short-Run Model (Interaction Effects)***

$\Delta lnFDI_t = \beta_0 + \beta_1 \Delta lnCIT_t + \beta_2 \Delta lnCED_t + \beta_3 \Delta\, lnPPT_t + \beta_4 \Delta lnVAT_t + \beta_5 \Delta lnTAXC_t + \beta_6 (\Delta lnCIT_t \times \Delta lnTAXC_t) + \beta_7 (\Delta lnCED_t \times \Delta lnTAXC_t) + \beta_8 (\Delta lnPPT_t \times \Delta lnTAXC_t) + \beta_9 (\Delta lnVAT_t \times \Delta lnTAXC_t) + \beta_{10} \Delta lnEXR_t + \beta_{11} COR_t + \beta_{12} \Delta lnFDI_{\{t-1\}} + \varepsilon_t$………………………………………………………………………………..
Equ 3.2

Where:

$\Delta \ln FDI_t$ denotes the short-run percentage change in foreign direct investment inflows in year t;

$\Delta \ln CIT_t$ represents the short-run percentage change in company income tax;

$\Delta \ln CED_t$ represents the short-run percentage change in customs and excise duties;

$\Delta \ln PPT_t$ denotes the short-run percentage change in petroleum profit tax;

$\Delta \ln VAT_t$ represents the short-run percentage change in value added tax;

$\Delta \ln TAXC_t$ denotes the short-run percentage change in tax concessions;

$\Delta \ln EXR_t$ represents the short-run percentage change in the exchange rate;

COR_t denotes the corruption perception index score;

$\Delta \ln FDI_{t-1}$ is the one-period lag of the short-run change in foreign direct investment, capturing dynamic adjustment effects;

$\Delta \ln CIT_t \times \Delta \ln TAXC_t$ captures the moderating effect of tax concessions on the relationship between company income tax and foreign direct investment;

$\Delta \ln CED_t \times \Delta \ln TAXC_t$ captures the moderating effect of tax concessions on the relationship between customs and excise duties and foreign direct investment;

$\Delta \ln PPT_t \times \Delta \ln TAXC_t$ captures the moderating effect of tax concessions on the relationship between petroleum profit tax and foreign direct investment;

$\Delta \ln VAT_t \times \Delta \ln TAXC_t$ captures the moderating effect of tax concessions on the relationship between value added tax and foreign direct investment;

$\alpha_0$and$\beta_0$are intercept terms;

$\alpha_i$andβ_i(for $i = 1, ..., 12$) are short-run slope coefficients to be estimated;

the interaction coefficients $\beta_6 - \beta_9$ capture the moderating effect of tax concessions on the short-run relationship between tax policy variables and foreign direct investment inflows; and

$\varepsilon_t$is the stochastic error term.

3.9 Operationalisation of the Variables

The Table 3.1 shows the measurement of variables used for this study in the order of dependent variable and independent variables; as well as their expected signs.

Table 3.1 Description and Measurements of the Variables

S/N	Variable	Proxy	Type of Variable	Measurement	Used by	A priori Expectation
1	Foreign Direct Investment	FDI	Dependent	Net inflows of foreign direct investment as a percentage of GDP yearly for 30 years	Appiah-Kubi et al. (2021)	Nil
2	Company Income Tax	CIT	Independent	Company income tax revenue collected (₦ billion) yearly for 30 years	Oruwari (2022); Adebisi (2020)	Positive
3	Customs and Excise Duties	CED	Independent	Customs and excise duties revenue collected (₦ billion) yearly for 30 years	Oruwari (2022); Adebisi (2020)	Positive
4	Petroleum Profit Tax	PPT	Independent	Petroleum profit tax revenue collected (₦ billion) yearly for 30 years	Oruwari (2022); Adebisi (2020)	Positive
5	Value Added Tax	VAT	Independent	Value added tax revenue collected at the federal level (₦ billion) yearly for 30 years	Oruwari (2022); Adebisi (2020)	Positive
6	Tax Concessions	TAXC	Moderating	Proxied by tax revenue gap: statutory tax revenue minus actual tax revenue collected (₦ billion) yearly for 30 years	Dare et al. (2019)	Positive
7	Corruption	COR	Control	Corruption Perception Index (CPI rating) yearly for 30 years	Akinlabi et al. (2011)	Negative
8	Exchange Rate	EXR	Control	Naira to US dollar exchange rate (period average) yearly for 30 years	Akinlabi et al. (2011)	Negative

Source: Researcher's compilation (2026)

3.9.1. Measurement of Tax concessions

In line with public finance and investment policy literature, tax concessions refer to government-granted reductions in tax liability arising from exemptions, tax holidays, capital and investment allowances, import duty waivers, and other tax reliefs (OECD, 2010; IMF, 2014; UNCTAD, 2023). At the national level, these concessions are most appropriately captured as tax revenue forgone, commonly referred to as tax expenditures. However, the Nigerian Bureau of Statistics (NBS) and the Nigeria Revenue Service (NRS) do not publish a single aggregate measure explicitly labelled as 'tax concessions". Consequently, following Dare et al. (2019) and Hutton (2017), tax concessions in this study are proxied using the tax revenue gap, defined as the difference between potential statutory tax revenue and actual tax revenue collected. This measure captures the aggregate fiscal cost of tax exemptions, holidays, allowances, and other reliefs over the study period. Accordingly, the tax concession variable (TAXC) is constructed as:

$$\text{Tax Concessions}_t = \text{Statutory Tax Revenue}_t - \text{Actual Tax Revenue}_t$$

Where: statutory tax revenue is approximated as gross domestic product multiplied by the applicable statutory tax rate, while actual tax revenue represents total tax revenue collected by the government.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the empirical analysis of the study and reports the results obtained from the estimation procedures adopted to address the research objectives. The analysis begins with a preliminary examination of the data before proceeding to econometric estimation and diagnostic evaluation. Specifically, the chapter first reports the descriptive statistics of the time-series data spanning 30 years (1994-2024), in order to summarise the central tendencies, dispersion, and distributional properties of the study variables over the period. This provides initial insights into the behaviour of foreign direct investment as well as the selected tax policy, macroeconomic, and institutional variables.

Subsequently, unit root tests are conducted to examine the time-series properties of the variables and to determine their orders of integration, which is necessary for selecting an appropriate econometric technique. Following these preliminary analyses, the chapter proceeds to the estimation of the econometric models and the presentation of the empirical results. Post-estimation diagnostic tests are also reported to assess the validity and reliability of the estimated models. The findings from these analyses form the basis for the testing of hypotheses and the discussion of results that conclude the chapter.

4.2. Preliminary Analysis

This subsection presents the descriptive statistics of the study variables, including the mean, median, minimum, maximum, standard deviation, and number of observations. As descriptive

statistics are intended to provide an economic overview of the data in meaningful units, the analysis is conducted using the raw values of the variables in their original units of measurement in order to reflect their actual economic magnitudes. Data transformations, including logarithmic and differencing procedures, are subsequently applied at the unit root testing and model estimation stages.

Table 4.1: Descriptive Statistics of Study Variables

Variable	Mean	Median	Min.	Max.	Std. Dev.	Obs.
FDI (% of GDP)	1.208	1.07	-0.029	2.9	0.886	31
TAXC (₦'bn)	17,904.85	10,437.04	424.77	61,672.63	18,695.10	31
CED (₦'bn)	726.265	297.5	18.095	6,105.40	1,229.79	31
PPT (₦'bn)	1,458.09	1,349.50	24.6	4,209.02	1,198.83	31
CIT (₦'bn)	1,031.47	595.182	12.275	8,386.51	1,692.93	31
VAT (₦'bn)	878.797	481.407	7.261	6,721.36	1,360.13	31
EXR (₦/US$ average)	222.642	148.88	21.884	1,480.18	271.558	31
COR (CPI rating)	21.621	24	1	28	6.132	29

Source: Researcher's computation using STATA 19

The descriptive statistics presented in Table 4.1 summarise the key characteristics of the study variables over the period 1994-2024. Foreign direct investment (FDI), measured as net inflows as a percentage of GDP, has a mean value of 1.208 per cent, indicating that, on average, FDI inflows accounted for about 1.2 per cent of Nigeria's GDP over the study period. The minimum and maximum values range from -0.029 per cent to 2.9 per cent, suggesting considerable volatility in foreign investment inflows across years. The variable of tax concessions (TAXC), showed a mean value of ₦17,904.85 billion, reflecting substantial revenue forgone by the government through exemptions, holidays, and other incentive schemes. The minimum value of

₦424.77 billion and the maximum value of ₦61,672.63 billion indicate a wide variation in the scale of tax concessions over time. Customs and excise duties (CED) have an average value of ₦726.27 billion, with values ranging from ₦18.10 billion to ₦6,105.40 billion, suggesting significant growth in trade-related tax revenue over the study period.

Further, the variable of PPT has a mean of ₦1,458.09 billion, highlighting the continued importance of the petroleum sector in Nigeria's fiscal structure. The minimum value of ₦24.6 billion and maximum value of ₦4,209.02 billion reflect fluctuations associated with changes in oil prices, production levels, and petroleum sector policies. Company Income Tax (CIT) has an average value of ₦1,031.47 billion, with values ranging from ₦12.28 billion to ₦8,386.51 billion, indicating substantial expansion in corporate tax revenue over time. The variable of VAT also shows a relatively high mean of ₦878.80 billion, with a minimum of ₦7.26 billion and a maximum of ₦6,721.36 billion, reflecting the broadening of the consumption tax base and improvements in VAT administration. The result also shows that exchange rate (EXR), measured as the Naira-US dollar period average, and has a mean value of ₦222.64 per US dollar, with a minimum of ₦21.88 and a maximum of ₦1,480.18, underscoring the substantial depreciation of the Naira over the study period.

Finally, corruption (COR), measured using the Corruption Perceptions Index rating, has a mean score of 21.62, with values ranging from 1 to 28 and a total of 29 observations due to data availability from 1996 onward. This suggests persistently low but gradually improving corruption perception scores over the sample period. It should be noted that the Corruption Perceptions Index ranges from 0 (highly corrupt) to 100 (very clean), with higher scores indicating greater transparency. Accordingly, the low mean and maximum values observed in Table 4.1 reflect persistently high levels of perceived corruption in Nigeria over the study period.

4.3. Unit Root Tests

This subsection presents the results of the Augmented Dickey-Fuller (ADF) unit root test conducted to examine the stationarity properties of the study variables. Testing for unit roots is necessary to determine the order of integration of each time-series variable and to ensure the suitability of subsequent econometric estimation procedures. The ADF test is applied to the variables in both levels and first differences to determine whether the series are I(0) or I(1), which guides the subsequent estimation techniques employed.

Table 4.2: Augmented Dickey-Fuller (ADF) Unit Root Test Results

Variable	ADF Level (trend) lag=1 Z(t)	p-value	Decision @5% (Level)	ADF 1st Diff (no trend) lag=0 Z(t)	p-value	Decision @5% (Diff)	Order of Integration
lnFDI	-1.858	0.676	Non-stationary	-4.766	0.000	Stationary	I(1)
lnTAXC	-0.802	0.966	Non-stationary	-4.313	0.000	Stationary	I(1)
lnCED	-0.785	0.967	Non-stationary	-3.841	0.003	Stationary	I(1)
lnPPT	-2.009	0.597	Non-stationary	-5.537	0.000	Stationary	I(1)
lnCIT	-1.544	0.814	Non-stationary	-4.331	0.000	Stationary	I(1)
lnVAT	-0.831	0.963	Non-stationary	-2.919	0.043	Stationary	I(1)
lnEXR	-1.969	0.618	Non-stationary	-4.112	0.001	Stationary	I(1)
COR	-3.245	0.018	Stationary	-	-	-	I(0)

Source: Researcher's computation using STATA 19

The unit root test results reported in Table 4.2 indicate mixed orders of integration among the study variables. At the 5 per cent significance level, the Augmented Dickey-Fuller (ADF) tests with a deterministic trend in levels fail to reject the null hypothesis of a unit root for lnFDI, lnTAXC, lnCED, lnPPT, lnCIT, lnVAT, and lnEXR, as their associated p-values exceed the conventional threshold. However, when these variables are first differenced and estimated

without a deterministic trend, the ADF statistics become sufficiently negative and statistically significant, with p-values ranging from 0.000 to 0.043. Specifically, the ADF statistics include −4.766 for ΔlnFDI, −4.313 for ΔlnTAXC, −3.841 for ΔlnCED, −5.537 for ΔlnPPT, −4.331 for ΔlnCIT, −2.919 for ΔlnVAT, and −4.112 for ΔlnEXR. These results confirm that lnFDI, lnTAXC, lnCED, lnPPT, lnCIT, lnVAT, and lnEXR are integrated of order one, I(1).

In contrast, the corruption variable (COR) is found to be stationary at level, as the ADF test statistic of −3.245 with a p-value of 0.018 leads to the rejection of the null hypothesis of a unit root at the 5 per cent level. This indicates that COR is integrated of order zero, I(0). Importantly, none of the variables is integrated of order two, I(2).

The implication of these results is that the study variables exhibit a combination of I(0) and I(1) integration orders. This mixed order of integration renders econometric techniques that require all variables to be integrated of the same order, such as the Johansen cointegration approach, inappropriate. However, the absence of any I(2) variable satisfies the key precondition for the application of the autoregressive distributed lag (ARDL) modelling framework. Consequently, the study proceeds to test for the existence of a long-run relationship among the variables using the ARDL bounds testing approach to cointegration. Depending on the outcome of the bounds test, the analysis will proceed either by estimating a long-run ARDL model with an associated error correction representation or, where no cointegration is established, by focusing on the short-run dynamic relationships among the differenced variables.

4.4. ARDL Bounds Test for Cointegration

This subsection presents the results of the ARDL bounds test conducted to examine the existence of a long-run relationship among foreign direct investment (FDI), tax policy variables, tax concessions, and the control variables. The ARDL bounds testing approach was employed because the unit root test results revealed a mixed order of integration among the variables, with some variables integrated at level, I(0), and others at first difference, I(1), while none was integrated of order two, I(2). The ARDL bounds testing technique, developed by Pesaran, Shin, and Smith (2001), is particularly appropriate under such circumstances because it accommodates variables with mixed integration orders without requiring that all variables be integrated at the same level. Furthermore, the approach is suitable for relatively small sample sizes and provides a robust framework for determining whether a stable long-run equilibrium relationship exists among the variables. Establishing the presence or absence of cointegration is essential because it determines whether the analysis should proceed with a long-run error correction model or focus solely on short-run dynamic relationships.

Table 4.3: ARDL Bounds Test

Test Component	Statistic	Value	10% Critical Bounds	5% Critical Bounds	1% Critical Bounds	Decision
Bounds Test (F-statistic)	F-stat	2.025	I(0): 2.433 I(1): 3.914	I(0): 2.999 I(1): 4.733	I(0): 4.467 I(1): 6.836	No cointegration
Bounds Test (t-statistic)	T-stat	-0.342	I(0): -2.467 I(1): -4.070	I(0): -2.874 I(1): -4.595	I(0): -3.734 I(1): -5.713	No cointegration
Error Correction Term (Adjustment Coefficient)	ADJ (L1.ln_fdi)	-0.096 (p = 0.737)	-	-	-	Insignificant

Source: Researcher's computation using STATA 19

The results of the ARDL bounds test for cointegration are presented in Table 4.3. As observed, the computed F-statistic of 2.025 is lower than the lower bound critical values at the 10 per cent, 5 per cent, and 1 per cent significance levels. Specifically, the F-statistic falls below the I(0) critical values of 2.433, 2.999, and 4.467 at the respective significance levels. Consequently, the null hypothesis of no long-run relationship among the variables cannot be rejected. This indicates the absence of cointegration between foreign direct investment, tax policy variables, tax concessions, and the control variables over the study period. The t-statistic associated with the bounds test further reinforces this conclusion. The computed t-statistic of -0.342 is less negative than the corresponding lower bound critical values at all conventional significance levels, providing additional evidence in support of the null hypothesis of no level relationship. Together, the F-statistic and t-statistic results consistently indicate that a stable long-run equilibrium relationship does not exist among the variables.

Consistent with the bounds test outcomes, the estimated error correction term, represented by the lagged level of lnFDI, is negative but statistically insignificant, with a coefficient of -0.096 and a p-value of 0.737. The insignificance of the adjustment coefficient implies that deviations from long-run equilibrium do not trigger a systematic correction process, further confirming the absence of cointegration. What the overall ARDL bounds test results suggest is that the relationship between foreign direct investment and the explanatory variables is predominantly short-run in nature. Accordingly, subsequent analysis in the study focuses on the estimation and interpretation of short-run dynamic estimates rather than long-run equilibrium relationships.

4.5 Short-Run ARDL Estimations

This section presents the short-run Autoregressive Distributed Lag (ARDL) estimation results examining the dynamic relationship between foreign direct investment (FDI), tax policy variables, tax concessions, and the control variables. The ARDL approach was adopted because it provides a flexible and robust framework for analysing both the dynamic and lagged effects of explanatory variables on the dependent variable. In addition, the ARDL model is suitable for studies involving variables integrated of mixed orders, I(0) and I(1), provided none of the variables is integrated of order two, I(2). It also performs efficiently with relatively small sample sizes and allows each variable to have its own optimal lag structure, thereby capturing delayed policy effects more accurately.

The bounds cointegration test indicated the absence of a statistically significant long-run equilibrium relationship among the variables. Consequently, the analysis focuses on the short-run dynamics by estimating the ARDL model in first differences without an error correction term. This approach enables the estimation of the immediate and lagged impacts of changes in tax policy variables on FDI while avoiding the misspecification that would arise from imposing a long-run relationship where none exists.

Accordingly, the baseline short-run model (Model 1) is first estimated to examine the direct effects of tax policy variables on foreign direct investment. Thereafter, interaction terms between tax concessions and the tax policy variables are introduced in Model 2 to assess whether tax concessions moderate the relationship between tax policy and foreign direct investment. This sequential modelling strategy facilitates comparison between the direct effects and the

conditional effects, thereby providing a more comprehensive understanding of the short-run dynamics of tax policy and FDI in Nigeria.

Table 4.4: Baseline Short-Run Dynamic Model 1

Dependent Variable: ΔlnFDI				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-Value**
ΔlnCIT	0.014	0.249	0.06	0.954
ΔlnCED	0.207	0.268	0.78	0.447
ΔlnPPT	-0.020	0.093	-0.22	0.828
ΔlnVAT	-0.350	0.446	-0.78	0.442
ΔlnTAXC	0.082	0.429	0.19	0.851
ΔlnEXR	0.544	0.151	3.62	0.002***
COR	-0.008	0.008	-0.97	0.344
ΔlnFDI (-1)	-0.170	0.157	-1.08	0.294
Constant	0.118	0.248	0.48	0.638
Observations = 29				
F-statistic = 2.69 (p = 0.0346)**				
R^2 = 0.518				
Adjusted R^2 = 0.326				
Root MSE = 0.212				

Source: Researcher's computation using STATA 19.***p<0.01; **p<0.05
Note: *The symbol Δ (delta) denotes first differencing of a variable. For example, ΔlnCIT means short-run percentage change in company income tax revenue.*

Table 4.4 presents the estimates of the baseline short-run dynamic model assessing the direct effects of tax policy variables on FDI in the absence of interaction terms. The overall model is statistically significant, as indicated by an F-statistic of 2.69 with a p-value of 0.0346, suggesting that the explanatory variables jointly account for short-run movements in foreign direct investment. Also, the model explains approximately 51.8% of the variation in short-run changes in FDI, as reflected by the R-squared value, while the adjusted R-squared of 0.326 indicates a moderate level of explanatory power after accounting for degrees of freedom. The Root Mean

Squared Error of 0.212 suggests the presence of residual short-run volatility, which is consistent with the inherent variability typically observed in macroeconomic time-series models estimated in first differences. The lagged change in foreign direct investment entered the model with a negative coefficient of -0.170 and a p-value of 0.294, indicating weak short-run adjustment dynamics. However, the lack of statistical significance suggests that past short-run changes in foreign direct investment did not strongly predict current movements in the baseline model.

With respect to the direct short-run effects of tax policy variables, changes in CIT recorded a small positive coefficient of 0.014 but were statistically insignificant, with a p-value of 0.954, indicating that short-run fluctuations in company income tax did not exert a measurable direct influence on FDI. Changes in CED also displayed a positive coefficient of 0.207 with a p-value of 0.447, implying the absence of a statistically significant short-run effect. Petroleum profit tax entered the model with a negative coefficient of -0.020 and a p-value of 0.828, suggesting that short-run changes in petroleum taxation were not significantly associated with variations in foreign direct investment. Also, the variable of VAT recorded a negative coefficient of -0.350 with a p-value of 0.442, indicating that short-run changes in indirect taxation did not exert a statistically significant direct effect on foreign direct investment. Finally, changes in tax concessions (TAXC) exhibited a positive coefficient of 0.082 but were statistically insignificant, with a p-value of 0.851, implying that short-run variations in tax concessions did not independently influence FDI.

Regarding the control variables and dynamic adjustment, changes in the exchange rate exhibited a positive and statistically significant coefficient of 0.544 with a p-value of 0.002, indicating that exchange rate movements exerted a strong and immediate influence on FDI in the short run. This finding suggests that macroeconomic conditions, particularly exchange rate dynamics,

dominated short-run investment decisions when tax policy variables were considered in isolation. The corruption variable (COR) recorded a negative coefficient of -0.008 but was statistically insignificant, with a p-value of 0.344, implying that corruption did not exert an independent short-run effect in the baseline specification.

Overall, the baseline short-run model provides initial evidence that, apart from the exchange rate, tax policy variables did not exert statistically significant direct effects on foreign direct investment in the short run. The insignificance of all tax policy variables in the baseline model indicates that, in the absence of conditioning or moderating mechanisms, tax instruments do not independently drive short-run changes in FDI. To investigate the possibility that tax concessions may alter the manner in which individual tax instruments affect FDI, the analysis proceeds to Model 2.

Table 4.5: Short-Run Dynamic Model with Moderating Effect of Tax Concessions

Dependent Variable: ΔlnFDI				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-Value**
ΔlnCIT	-2.001	0.587	-3.41	0.004***
ΔlnCED	-0.463	0.404	-1.15	0.268
ΔlnPPT	0.108	0.113	0.95	0.355
ΔlnVAT	1.458	0.79	1.84	0.084*
ΔlnTAXC	-1.940	1.251	-1.55	0.140
ΔCIT × ΔTAXC	17.47	4.908	3.56	0.003***
ΔCED × ΔTAXC	4.683	2.827	1.66	0.117
ΔPPT × ΔTAXC	-0.052	0.762	-0.07	0.947
ΔVAT × ΔTAXC	-14.049	6.276	-2.24	0.040**
ΔlnEXR	0.562	0.133	4.23	0.001***
COR	-0.019	0.008	-2.31	0.035**
ΔlnFDI (-1)	-0.542	0.179	-3.03	0.008***
Constant	0.549	0.23	2.39	0.030
Observations = 29				
F-statistic = 4.31 (p = 0.0039)***				
R^2 = 0.764				
Adjusted R^2 = 0.586				
Root MSE = 0.166				

Source: Researcher's computation using STATA 19.***p<0.01; **p<0.05; *p<0.1

Table 4.5 presents the estimates of the extended short-run dynamic model that incorporates interaction terms between tax concessions and the tax policy variables. It can be seen that, relative to the baseline specification (Model 1), the inclusion of interaction terms leads to a notable improvement in overall model performance. Specifically, the adjusted R-squared rises from 0.326 in Model 1 to 0.586 in Model 2, indicating that the moderated specification explains a substantially larger proportion of short-run variations in foreign direct investment. In addition, the Root Mean Squared Error (MSE) declines from 0.212 to 0.166, reflecting improved

predictive accuracy and a reduction in unexplained short-run volatility once moderation effects are accounted for. The overall model is statistically significant, with an F-statistic of 4.31 and a corresponding p-value of 0.0039, confirming that the regressors jointly exert a significant influence on short-run changes in foreign direct investment.

Regarding the direct short-run effects, the result showed that changes in CIT exhibited a negative and statistically significant coefficient of -2.001 with a p-value of 0.004. This implies that, holding other factors constant, an increase in company income tax is associated with a reduction in foreign direct investment in the short run. Notably, this effect was statistically insignificant in the baseline model, indicating that the short-run impact of company income tax becomes evident only after accounting for interaction effects. Also, changes in value added tax record a positive coefficient of 1.458 with a marginal p-value of 0.084, suggesting that increases in value added tax are associated with higher foreign direct investment in the short run at the 10 per cent significance level. This represents a departure from Model 1, where value added tax was statistically insignificant, highlighting the sensitivity of this tax instrument to model specification. In contrast, the direct effects of changes in tax concessions, customs and excise duties, and petroleum profit tax remain statistically insignificant, implying that short-run variations in these variables do not independently influence foreign direct investment.

On the moderating effects, the result showed that the interaction between company income tax and tax concessions is positive and statistically significant, with a coefficient of 17.470 and a p-value of 0.003 ($p<0.01$). This indicates that tax concessions significantly condition the short-run effect of company income tax on foreign direct investment. While increases in company income tax exert a negative direct effect, the presence of tax concessions mitigates this adverse impact, suggesting that tax incentives play an important role in offsetting the discouraging effects of

corporate taxation on foreign investment in the short run. The interaction between value added tax and tax concessions is negative and statistically significant, with a coefficient of -14.049 and a p-value of 0.040. This implies that the positive short-run effect of value added tax diminishes as tax concessions increase, indicating that tax incentives alter the manner in which indirect taxation influences foreign direct investment. By contrast, the interaction terms involving customs and excise duties and petroleum profit tax are statistically insignificant, suggesting that tax concessions do not meaningfully moderate the short-run effects of these tax instruments.

With respect to the control variables and dynamic adjustment, the result shows that changes in the exchange rate retain a positive and highly significant coefficient of 0.562 with a p-value of 0.001. This confirms that exchange rate movements exert a strong and immediate influence on foreign direct investment in the short run, and that this effect remains robust across both Model 1 and Model 2. The increase in magnitude relative to the baseline model suggests that macroeconomic conditions continue to play a dominant role in shaping short-run investment decisions, even after accounting for tax-based moderation effects. The corruption variable (COR) possesses a negative and statistically significant coefficient of -0.019 and a p-value of 0.035, indicating that higher levels of perceived corruption are associated with reductions in foreign direct investment in the short run. It is important to note that the variable COR was statistically insignificant in Model 1 but becomes significant in Model 2, suggesting that institutional factors gain explanatory relevance once interaction effects are incorporated. The lagged dependent variable is negative and statistically significant, with a coefficient of -0.542 and a p-value of 0.008, indicating the presence of short-run adjustment dynamics whereby increases in foreign direct investment in the previous period are followed by partial corrections in the current period.

The magnitude and significance of this coefficient confirm that the model adequately captures dynamic behaviour rather than static correlations.

4.6 Post-Estimation Diagnostic Tests

This section presents the post-estimation diagnostic tests conducted to assess the validity and robustness of the estimated short-run models. The diagnostic tests examine key regression assumptions, including multicollinearity, serial correlation, heteroskedasticity, and normality of the residuals, in order to ensure the reliability of the estimated coefficients and statistical inferences.

Table 4.6. Cameron-Trivedi IM-Test for Normality of Regression Residuals

Test Component	χ^2 Statistic	df	p-Value	Decision
Heteroskedasticity	29	28	0.4125	Not rejected
Skewness	12.69	12	0.3923	Not rejected
Kurtosis	2.54	1	0.1107	Not rejected
Joint Normality (IM-Test)	44.23	41	0.3369	Residuals normally distributed

Source: Researcher's computation using STATA 19.

Table 4.6 reports the results of the Cameron-Trivedi information matrix (IM) test for normality of the regression residuals. The skewness component yields a chi-square statistic of 12.69 with a p-value of 0.3923, while the kurtosis component records a chi-square statistic of 2.54 with a p-value of 0.1107. In both cases, the null hypothesis of normality cannot be rejected at the 5 per cent significance level, indicating that the residuals do not exhibit significant skewness or excess kurtosis. The joint IM-test statistic of 44.23, with an associated p-value of 0.3369, further confirms that the residuals are approximately normally distributed. This provides strong evidence of the absence of systematic departures from normality in the error terms of the estimated short-run model.

Table 4.7: Variance Inflation Factor (VIF) Test for Multicollinearity

Variable	VIF	Tolerance (1/VIF)
ΔlnCED	2.5	0.399
ΔlnVAT	2.46	0.406
ΔlnPPT	1.73	0.578
COR	1.67	0.6
ΔlnFDI (-1)	1.57	0.636
ΔlnTAXC	1.56	0.642
ΔlnCIT	1.37	0.73
ΔlnEXR	1.31	0.763
Mean VIF	**1.77**	

Source: Researcher's computation using STATA 19.

Table 4.7 presents the results of the variance inflation factor (VIF) test conducted to assess the presence of multicollinearity among the explanatory variables in the short-run moderated model. The individual VIF values range from 1.31 to 2.50, while the mean VIF is 1.77. These values are well below the conventional threshold of 10, as well as the more conservative benchmark of 5, indicating the absence of serious multicollinearity among the regressors.

The corresponding tolerance values, measured as the inverse of the VIF, are all substantially above the minimum acceptable level of 0.10, providing further evidence that the explanatory variables are not highly correlated. This result suggests that the estimated coefficients are stable and that their statistical significance is not adversely affected by linear dependence among the regressors, notwithstanding the inclusion of interaction terms in the model. Thus, the regression coefficients can be interpreted with confidence, and the validity of the estimated relationships is not compromised by excessive correlation among the explanatory variables.

Table 4.8: Tests for Serial Correlation and Heteroskedasticity

Breusch-Godfrey LM Test for Serial Correlation					
Test (Serial Correlation)	Lags	χ^2 Statistic	df	p-Value	Decision
Breusch-Godfrey LM	1	2.464	1	0.1165	No serial correlation
Breusch-Pagan Test for Heteroskedasticity					
Test (Heteroskedasticity)		χ^2 Statistic	df	p-Value	Decision
Breusch-Pagan / Cook-Weisberg	-	0.11	1	0.7366	Homoskedastic errors

Source: Researcher's computation using STATA 19.

Table 4.8 reports the post-estimation diagnostic tests conducted to examine the presence of serial correlation and heteroskedasticity in the residuals of the estimated short-run model. The Breusch-Godfrey LM test for serial correlation yields a chi-square statistic of 2.464 with a p-value of 0.1165. Since this p-value exceeds the 5 per cent significance level, the null hypothesis of no serial correlation cannot be rejected, indicating that the model residuals are free from first-order autocorrelation.

The table also presents the results of the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity. The computed chi-square statistic of 0.11 with a p-value of 0.7366 indicates that the null hypothesis of constant variance cannot be rejected. This suggests that the residuals are homoskedastic and that the estimated standard errors are not distorted by heteroskedasticity. What the outcomes of both tests indicate is that the estimated short-run model satisfies key classical regression assumptions. Consequently, the coefficient estimates and associated statistical inferences drawn from the model can be regarded as valid and robust.

4.7 Test of Hypotheses

This subsection presents the summary of hypothesis testing based on the estimated short-run ARDL models. The purpose is to statistically examine whether the hypothesised relationships among tax policy variables, tax concessions, and foreign direct investment are supported by empirical evidence. Hypotheses are evaluated using the coefficient estimates and associated p-values obtained from the baseline short-run model (Model 1) and the moderated short-run model (Model 2). All tests are conducted using a two-tailed framework at the 5 per cent level of significance. Where the computed p-value is less than 0.05, the null hypothesis is rejected in favour of the alternative, indicating the presence of a statistically significant short-run effect. Conversely, where the p-value exceeds the 5 per cent significance threshold, the null hypothesis cannot be rejected, suggesting that the evidence does not support a statistically significant relationship.

The summary of the hypotheses tested and the corresponding decisions is presented in Table 4.9 below.

Table 4.9: Summary of Hypotheses Testing and Decisions

Ho	Statement	Model Tested	Key Variable	Coeff.	p-Value	Decision (5%)
H_{01}	Company income tax (CIT) has no significant short-run effect on foreign direct investment inflows in Nigeria	Model 1	ΔlnCIT	0.014	0.954	Not Rejected
H_{02}	Customs and excise duties (CED) have no significant short-run effect on foreign direct investment inflows in Nigeria	Model 1	ΔlnCED	0.207	0.447	Not Rejected
H_{03}	Petroleum profit tax (PPT) has no significant short-run effect on foreign direct investment inflows in Nigeria	Model 1	ΔlnPPT	-0.020	0.828	Not Rejected
H_{04}	Value added tax (VAT) has no significant short-run effect on foreign direct investment inflows in Nigeria	Model 1	ΔlnVAT	-0.350	0.442	Not Rejected
H_{05}	Tax concessions (TAXC) have no significant direct short-run effect on foreign direct investment inflows in Nigeria	Model 1	ΔlnTAXC	0.082	0.851	Not Rejected
H_{06}	Tax concessions do not significantly moderate the relationship between CIT and foreign direct investment inflows in Nigeria	Model 2	ΔlnCIT × ΔlnTAXC	17.47	0.003	Rejected***
H_{07}	Tax concessions do not significantly moderate the relationship between CED and foreign direct investment inflows in Nigeria	Model 2	ΔlnCED × ΔlnTAXC	4.683	0.117	Not Rejected
H_{08}	Tax concessions do not significantly moderate the relationship between PPT and foreign direct investment inflows in Nigeria	Model 2	ΔlnPPT × ΔlnTAXC	-0.052	0.947	Not Rejected
H_{09}	Tax concessions do not significantly moderate the relationship between VAT and foreign direct investment inflows in Nigeria	Model 2	ΔlnVAT × ΔlnTAXC	-14.05	0.04	Rejected**

Source: Researcher's computation using STATA 19.

Table 4.9 summarises the outcomes of the hypothesis testing relating to the short-run effects of tax policy variables on foreign direct investment (FDI) and the moderating role of tax concessions (TAXC). The results indicate that the null hypotheses of no direct short-run effect of company income tax, customs and excise duties, petroleum profit tax, value added tax, and tax

concessions on foreign direct investment are not rejected. This suggests that, in the absence of moderation, tax policy instruments do not independently exert statistically significant short-run effects on foreign direct investment. Consequently, all the null hypotheses $H0_1$, H02, H03, H04, and H05 were accepted as all their respective probability values were all greater than 5%.

Furthermore, with respect to the moderating role of tax concessions, the results show that the null hypotheses relating to the interaction between tax concessions and company income tax (ΔlnCIT × ΔlnTAXC), as well as between tax concessions and value added tax (ΔlnVAT × ΔlnTAXC), are rejected because their probability values (i.e., 0.003 and 0.04, respectively) were both less than 5%. This indicates that tax concessions significantly condition the short-run effects of CIT and VAT on foreign direct investment. In contrast, the null hypotheses concerning the moderating effects of tax concessions on CED and PPT are not rejected due to high p-values (i.e., 0.117 and 0.947, respectively), implying the absence of statistically significant moderation for these tax instruments.

4.8 Discussion of Findings

4.8.1 Direct Effect of Company Income Tax on FDI

The results of the hypothesis testing indicate that CIT does not exert a statistically significant direct short-run effect on foreign direct investment inflows in Nigeria. This led to the acceptance of the HO1. What this implies is that the variation in the CIT when considered in isolation does not significantly influence foreign investors' decisions during the study period. In other words, changes in corporate taxation were not sufficient, on their own, to attract or deter foreign direct investment in the short run. From a theoretical perspective, this finding is consistent with the optimal tax theory, which argues that investment decisions are influenced not only by statutory

tax rates but also by the overall efficiency, predictability, and neutrality of the tax system. In environments characterised by administrative bottlenecks, policy uncertainty, and weak enforcement, reductions or increases in company income tax may fail to translate into meaningful investment responses. The result also aligns with normative tax theory, which emphasises that taxes should be evaluated based on their broader economic context rather than their nominal rates alone. In Nigeria, structural constraints such as infrastructure deficits, exchange rate volatility, and institutional weaknesses may have overshadowed the role of company income tax in shaping short-run foreign investment decisions. Consequently, foreign investors may prioritise macroeconomic stability and market fundamentals over marginal changes in corporate tax rates.

Empirically, this finding is consistent with several studies reviewed in Chapter Two, which reported insignificant or weak short-run effects of corporate taxation on foreign direct investment in developing economies. For example, studies like Adebisi (2020) and Oruwari (2022) similarly found that CIT does not significantly influence foreign investment inflows in Nigeria when considered independently. These studies argue that the effectiveness of corporate taxation as an investment policy tool is often constrained by institutional inefficiencies and broader macroeconomic risks.

However, the result contrasts with evidence from some advanced and emerging economies, where reductions in corporate income tax rates have been found to significantly stimulate foreign direct investment inflows. For instance, studies by De Mooij and Ederveen (2008) and Feld and Heckemeyer (2011) provide robust meta-analytic evidence that lower corporate tax rates are associated with increased FDI in OECD and emerging market economies. This divergence reinforces the argument that the responsiveness of foreign investment to company income tax is

highly context-dependent. In Nigeria's case, the absence of a significant direct effect suggests that corporate taxation alone is insufficient to drive foreign investment inflows unless complemented by supportive fiscal and institutional mechanisms.

4.8.2 Direct Effect of Customs and Excise Duties on FDI

Regarding the second hypothesis, the results showed that CED do not exert a statistically significant direct short-run effect on FDI inflows in Nigeria, leading to the acceptance of the null hypothesis two (H02). This result can be explained to mean that the short-run changes in trade-related taxes were not sufficiently influential to alter foreign investors' investment decisions during the study period. Consequently, variations in customs and excise duties did not independently function as a determinant of foreign direct investment in the Nigerian economy. When considered in terms of the theoretical underpinnings, it can be inferred that this result is consistent with tax discrimination theory, which suggests that differential tax treatment influences investment decisions primarily when it creates clear cost advantages for specific investors or sectors. In the absence of targeted or sector-specific exemptions, changes in customs and excise duties may not generate sufficiently strong incentives to attract foreign direct investment, particularly when such duties apply uniformly across firms. Moreover, multinational firms often internalise trade taxes into their cost structures or mitigate them through global supply chain strategies, thereby reducing their immediate impact on investment decisions.

When compared with the results of the reviewed prior studies, it can be seen that the insignificant effects of customs and excise duties on foreign direct investment corroborates some of the earlier Nigerian studies, beyond Adebisi (2020) and Oruwari (2022). For instance, similar evidence was reported by Anyanwu (2012), who found that trade-related taxes and tariff

structure exert weak influence on foreign direct investment in Nigeria once macroeconomic and institutional factors are controlled for. Likewise, Adegboye et al. (2019) observed that customs related taxes do not significantly attract foreign investment, attributing this outcome to administrative inefficiencies, policy inconsistency, and the prevalence of non-tariff barriers. These studies collectively suggest that the effectiveness of customs and excise duties as investment policy instruments in Nigeria has been undermined by weak trade facilitation, multiple tariff regimes, and regulatory bottlenecks, all of which reduce foreign investors' responsiveness to changes in trade taxation. The insignificance of customs and excise duties may also reflect the fact that foreign direct investment decisions are typically long-term and strategic, whereas customs and excise duty adjustments are often incremental and subject to frequent policy revisions. As a result, such taxes may not provide credible or stable signals capable of shaping short-run investment behaviour.

4.8.3 Direct Effect of Petroleum Profit Tax on FDI

The result of the third hypothesis, which is similar to those of the previous two, equally revealed that PPT does not exert a statistically significant direct short-run effect on foreign direct investment inflows in Nigeria, however the coefficient of PPT is negative while those of CIT and CED are positive. However, since the probability is statistically non-significant, the coefficient value is of no relevance. The non-significance of the third hypothesis suggests that short-run changes in petroleum profit taxation were not sufficient to influence aggregate foreign investment decisions during the study period. In effect, variations in PPT did not independently function as a short-run determinant of foreign direct investment inflows. Following theoretical projections, this finding can also be related to the tax discrimination theory, which recognises that petroleum taxation is highly sector-specific and often governed by specialised fiscal regimes.

Tordo et al. (2010) posit that foreign investment in the petroleum sector is typically influenced by long-term considerations such as global oil prices, reserve prospects, production costs, and contractual stability, rather than by short-term adjustments in tax rates. As a result, petroleum profit tax may exert limited influence on aggregate foreign direct investment, particularly when FDI is measured at the economy-wide level.

Empirically, the insignificant links between petroleum taxation and foreign direct investment inflows aligns with the results of Adebisi (2020) and Oruwari (2022) who similarly reported that petroleum-related taxes do not significantly influence aggregate FDI inflows, arguing that investment in the oil sector is largely driven by external market conditions and institutional factors rather than short-term fiscal changes. This reinforces the view that petroleum taxation operates within a specialised and long-term investment framework, limiting its effectiveness as a short-run policy instrument for attracting foreign direct investment. The insignificance of petroleum profit tax may also reflect the dual structure of Nigeria's foreign direct investment, where inflows are not exclusively concentrated in the petroleum sector. It may hold true that as non-oil sectors increasingly attract foreign investment; the influence of petroleum-specific taxes on total FDI inflows becomes diluted, further weakening the observed relationship.

4.8.4 Direct Effect of Value Added Tax on FDI

The variable of VAT is the fourth tax policy variable used in the study, as tested in hypothesis four. The result, based on the result reported in table 4.4, showed that VAT does not exert a statistically significant direct short-run effect on FDI inflows in Nigeria within the period covered by the study. What this suggests is that the short-run changes in value added tax, when considered independently, did not significantly influence foreign investors' investment decisions

during the 30 years period. This can be explained by the fact that VAT, as an indirect consumption-based tax does not directly tax profits which may explain its limited immediate relevance for FDI decisions. Theoretically, this result on VAT can also be related to the optimal tax theory, which posits that indirect taxes such as VAT are generally less distortionary to investment decisions than direct taxes on income or profits. Since VAT is largely borne by final consumers rather than producers, foreign investors may perceive it as having minimal impact on expected returns, particularly in the short run. Consequently, changes in VAT rates may not materially alter the profitability calculus underlying foreign investment decisions.

Most prior studies such as Adebisi (2020) and Oruwari (2022) similarly found that VAT does not independently drive foreign investment inflows, attributing this outcome to the indirect nature of the tax and the dominance of macroeconomic and institutional factors in shaping investment decisions. More so, the negative coefficient obtained in the variable VAT, although insignificant, aligns with the position of Klemm and Van Parys (2012) that when VAT is levied on capital goods without prompt input credit, investment costs rise, thereby discouraging FDI. However, while value added tax was insignificant in its direct effect, the subsequent moderation analysis revealed that its interaction with tax concessions was statistically significant. This suggests that although VAT alone does not influence foreign direct investment, its effect becomes relevant when combined with incentive mechanisms that alter the effective tax burden faced by investors. This conditional effect underscores the importance of examining tax instruments within an integrated fiscal framework rather than in isolation.

4.8.5 Direct Effect of Tax Concessions on FDI

The result of Hypothesis 5 indicates that tax concessions have no significant direct short-run effect on foreign direct investment inflows in Nigeria. The estimated coefficient of 0.082 with a p-value of 0.851 shows that the null hypothesis could not be rejected. This finding suggests that concessions, when considered in isolation, do not directly stimulate foreign investment in the short run. In other words, tax concessions did not function as a standalone driver of foreign direct investment in the short run.

This outcome can be explained through the tax discrimination theory and the optimal tax theory, both of which were adopted in the theoretical framework of this study. Tax discrimination theory posits that incentives create preferential treatment for certain investors or sectors compared to the general tax regime. However, if the wider investment climate is characterised by volatility, weak institutions or infrastructural deficits, such preferential treatment may fail to produce meaningful investment responses. The insignificance of tax concessions in this study reflects this theoretical position, as investors may perceive concessions as insufficient compensation for broader structural risks in Nigeria. Similarly, optimal tax theory emphasises that tax systems should balance efficiency, equity and revenue sustainability. Tax concessions, while reducing tax burdens, may undermine efficiency if they erode government revenue without yielding commensurate investment gains. The insignificant result observed here supports this caution, showing that concessions alone are not optimal instruments for driving FDI inflows. Instead, they must be embedded within a broader framework of credible tax policy and macroeconomic stability to be effective.

Empirically, when compared with the findings of Nwankwo and Okoro (2025), a divergence is observed. Their study found that specific incentives such as investment tax allowance and reduced corporate tax rate had significant long-run and short-run effects on FDI, while tax holidays were insignificant in the long run but significant in the short run. Similarly, Ubahi et al. (2025) reported that export expansion grants and gas utilisation incentives had a significant direct effect on FDI inflows. These results differ from the present study, which shows no direct short-run effect of concessions. The divergence can be explained by differences in measurement and scope. This study employed an aggregate measure of tax concessions, which may dilute the effect of individual incentives. In contrast, the other studies disaggregated incentives into specific categories such as investment allowances, tax holidays and sectoral incentives, making it easier to capture their direct impact. Methodological differences also contribute to the divergence. While this study focused on short-run dynamics using the ARDL framework, Nwankwo and Okoro (2025) emphasised both short-run and long-run effects, and Ubahi et al. (2025) employed an Error Correction Model that is more sensitive to long-run equilibrium relationships, but the nature of the model in the study did not support the estimation of long-run equilibrium relationships.

4.8.6 Moderating Effect of Tax Concessions on the Tax Policy-FDI Relationship

The results of the moderated short-run model provide clear statistical evidence that tax concessions significantly conditioned the relationship between selected tax policy variables and foreign direct investment inflows in Nigeria. The interaction between company income tax and tax concessions was positive and highly significant, with an estimated coefficient of 17.47 and a p-value of 0.003. This indicates that concessions substantially mitigated the adverse short-run effect of corporate taxation on foreign investment. In contrast, the interaction between value

added tax and tax concessions was negative and significant, with a coefficient of -14.05 and a p-value of 0.040, suggesting that concessions weakened the positive short-run effect of VAT on FDI. The moderating effects for customs and excise duties (coefficient 4.68, p-value 0.117) and petroleum profit tax (coefficient -0.052, p-value 0.947) were statistically insignificant, implying that concessions did not meaningfully alter the investment impact of these taxes.

From a theoretical perspective, these findings strongly support tax discrimination theory, which argues that differential tax treatment influences investor behaviour by altering the effective tax burden faced by firms. The significant positive interaction between company income tax and concessions demonstrates that incentives can offset the discouraging effect of corporate taxation, thereby reducing the effective tax burden and encouraging foreign investment. Conversely, the negative interaction between VAT and concessions reflects the caution of the optimal tax theory, which emphasises that incentives must be carefully targeted to avoid inefficiencies. Excessive or poorly structured concessions may distort the tax system and undermine their intended benefits, particularly when combined with indirect taxes such as VAT.

Empirically, these results align with the broader evidence in Nigeria and other developing economies. Nwankwo and Okoro (2025) found that reduced corporate tax rates and investment allowances had significant effects on FDI inflows, supporting the present finding that concessions are most effective when applied to taxes that directly influence profitability. Similarly, Ubahi et al. (2025) reported that export expansion grants and gas utilisation incentives had significant effects on FDI, but also noted that not all incentives were equally effective, which resonates with the present study's finding that concessions did not significantly moderate customs and excise duties or petroleum profit tax. Other studies such as Olaniyi et al. (2018) and Etim et al. (2019) also emphasised that tax incentives can attract FDI only when they interact

with core tax instruments and when the broader institutional environment supports their implementation.

The divergence between the present study and those of Nwankwo and Okoro (2025) and Ubahi et al. (2025) can be explained by differences in measurement and methodological scope. While those studies disaggregated incentives into specific categories and found significant direct effects, the present study employed an aggregate measure of concessions and focused on short-run dynamics. This highlights the conditional rather than direct role of concessions in influencing foreign direct investment. Overall, the findings demonstrate that tax concessions in Nigeria are most effective when they moderate taxes that directly affect firms' net returns, such as company income tax, rather than those that operate indirectly or within sector-specific regimes. This reinforces the importance of selective and well-targeted concessions as part of an optimal tax policy framework.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter synthesises the major empirical findings of the study and presents the conclusions reached based on the short-run econometric analysis and discussion of results in the preceding chapter. It also outlines policy-relevant recommendations arising from the findings, highlights the study's contribution to knowledge and suggests directions for future research.

5.2 Summary of Findings

Based on the empirical analyses and discussion of findings presented in the preceding chapter, the major findings of the study are summarised as follows:

1. The study found that company income tax does not have a statistically significant direct short-run effect on foreign direct investment inflows in Nigeria, suggesting that changes in corporate taxation alone do not independently influence foreign investment decisions in the short run.
2. The study also found that customs and excise duties do not exert a statistically significant direct short-run effect on foreign direct investment inflows, indicating that trade-related taxes do not independently drive short-run foreign investment inflows in Nigeria.
3. The results further showed that petroleum profit tax does not have a statistically significant direct short-run effect on foreign direct investment inflows, implying that

short-run changes in petroleum taxation do not significantly influence aggregate foreign investment decisions.

4. The study found that value added tax does not have a statistically significant direct short-run effect on foreign direct investment inflows, suggesting that indirect consumption-based taxation does not independently affect foreign investment inflows in the short run.
5. The findings indicate that tax concessions do not exert a statistically significant direct short-run effect on foreign direct investment inflows; implying that tax incentives, when implemented in isolation, do not independently attract foreign direct investment in Nigeria.
6. The study found that tax concessions significantly moderate the relationship between company income tax and foreign direct investment inflows, indicating that incentives condition the effect of corporate taxation on foreign investment decisions.
7. The results also show that tax concessions significantly moderate the relationship between value added tax and foreign direct investment inflows. This suggests that the investment effect of indirect taxation depends on the presence of tax incentives.
8. In contrast, the study found that tax concessions do not significantly moderate the relationships between customs and excise duties and foreign direct investment,
9. The study also found that tax concessions do not significantly moderate the relationships between petroleum profit tax and foreign direct investment. This implies that the moderating role of tax concessions is not uniform across all tax policy instruments.

5.3 Implications of the Findings

The findings of this study hold important policy, theoretical, and methodological implications for tax policy design and foreign direct investment attraction in Nigeria. From a policy perspective, for instance, the absence of statistically significant direct short-run effects of major tax policy instruments on foreign direct investment suggests that adjustments to statutory tax rates alone are insufficient to attract foreign investors. This implies that policymakers may need to move beyond isolated tax rate changes and adopt a more integrated fiscal strategy that combines taxation with credible incentive frameworks, macroeconomic stability, and institutional improvements. The significant moderating role of tax concessions in the relationships involving company income tax and value added tax further implies that incentives are most effective when they are strategically aligned with core investment-relevant taxes rather than applied uniformly or indiscriminately.

Theoretically, the results lend support to tax discrimination theory and optimal tax theory by demonstrating that tax incentives influence foreign investment primarily through their interaction with specific tax instruments rather than as standalone policy tools. The findings also align with Laffer curve theory by indicating that excessive or poorly targeted tax concessions may weaken the effectiveness of certain taxes, particularly indirect taxes, thereby generating distortions without proportionate investment gains. This reinforces the view that the investment response to taxation is context-dependent and conditioned by the structure and administration of the tax system. Also, from a methodological standpoint, the findings highlight the importance of incorporating interaction terms when analysing the tax-foreign direct investment nexus. Models that focus solely on direct effects may underestimate the role of tax incentives and overlook important conditional relationships.

5.4 Conclusion

This study examined the effect of tax policy on foreign direct investment inflows in Nigeria, with particular emphasis on the moderating role of tax concessions. Using annual time-series data spanning from 1994 to 2024 and a short-run ARDL framework. The study assessed both the direct effects of major tax policy instruments and the conditional role of tax concessions in shaping foreign investment inflows. The empirical results indicate that company income tax, customs and excise duties, petroleum profit tax, value added tax, and tax concessions do not exert statistically significant direct short-run effects on foreign direct investment inflows in Nigeria. This suggests that changes in individual tax instruments, when implemented in isolation, are insufficient to influence foreign investors' short-run investment decisions. Instead, macroeconomic and institutional conditions such as exchange rate dynamics and institutional quality, proxied by corruption perception, appear to play a more dominant role in shaping investment behaviour.

However, the study provides evidence that tax concessions significantly moderate the relationship between selected tax instruments and foreign direct investment. In particular, tax concessions were found to condition the effects of company income tax and value added tax on foreign investment inflows, while their moderating influence on customs and excise duties and petroleum profit tax was insignificant. These findings indicate that tax concessions are more effective as complementary fiscal tools that modify the impact of core taxes rather than as independent investment incentives.

The study therefore concludes that the effectiveness of tax policy in attracting foreign direct investment in Nigeria depends not on tax rates or incentives alone, but on how these instruments

interact within the broader fiscal and institutional framework. A strategic and coordinated approach to tax policy, in which tax concessions are carefully aligned with key investment-relevant taxes, is therefore essential for enhancing Nigeria's foreign direct investment performance.

5.5 Recommendations

Based on the empirical findings of this study and in light of the recently implemented Nigeria Tax Reform Acts 2025, the following policy recommendations are advanced to strengthen the effectiveness of tax policy in influencing FDI inflows.

1. Given that company income tax did not exert a significant short-run effect on FDI, so policymakers should prioritise predictability and efficiency in administration rather than rate changes. The 2025 Acts, which exempt small companies and impose a 15% minimum effective tax rate on large firms, reinforce the need for stability and transparent thresholds to reduce investor uncertainty.
2. Since customs and excise duties showed no significant impact on FDI, suggesting trade taxes should focus on facilitation and competitiveness. With Free Zone exemptions restricted from 2028, reforms should emphasise reducing non-tariff barriers and streamlining customs processes to sustain Nigeria's trade attractiveness.
3. The result showed that PPT did not significantly influence FDI inflows in the short run, indicating that fiscal policy should emphasise contractual stability and regulatory certainty. The study therefore recommends that the unified petroleum tax framework under the 2025 Acts should be applied consistently to strengthen investor confidence in long-term projects in the petroleum industry.

4. Value added tax was not found to directly affect FDI, so reforms should target compliance and efficiency rather than rate adjustments. The 2025 Acts introduced input VAT recovery, zero-rating of essentials, and mandatory e-invoicing, all of which should be implemented effectively to reduce compliance costs and enhance credibility.
5. The result also showed that tax concessions had no direct short-run effect but moderated the impacts of CIT and VAT. Tax incentives schemes should therefore be explicitly designed to offset the effective burden of corporate taxation for qualifying foreign investors, while VAT-related concessions should be carefully streamlined to reduce complexity and avoid eroding the tax base without commensurate investment gains. The replacement of pioneer status with the Economic Development Incentive (5% annual tax credit for five years) in the 2025 tax law reflects this need for targeted, performance-based concessions.

5.6 Contribution to Knowledge

This study makes several important contributions to knowledge in the area of taxation and foreign direct investment, particularly within the Nigerian context.

1. **Empirical Contribution:** The study contributes empirically by providing updated evidence on the short-run relationship between tax policy instruments and foreign direct investment in Nigeria using recent data and a dynamic ARDL framework.
2. **Methodological contribution:** Unlike most prior Nigerian studies that focus solely on direct tax effects, this study shows that tax concessions significantly condition the impact of company income tax and value added tax on foreign direct investment in the

short run. This moderation-based evidence deepens understanding of how fiscal incentives operate not in isolation, but through interaction with core tax instruments.

3. **Policy contribution:** The study contributes to policy-oriented scholarship by aligning empirical evidence with the provisions of the Nigeria Tax Reform Acts 2025. In doing so, it offers a timely academic assessment of the new tax regime's emphasis on streamlined incentives, minimum effective taxation, and administrative efficiency, thereby providing a research-based foundation for evaluating the investment implications of recent tax reforms in Nigeria.

5.7 Suggestions for Further Studies

The study structures the suggestions for further studies to flow from certain limitations that should be acknowledged when interpreting the findings.

1. The study focused on economy-wide foreign direct investment inflows as the dependent variable. While this approach allowed for a broad assessment of tax policy effects, it may have obscured sector-specific responses, particularly in capital-intensive industries such as oil and gas, manufacturing, and telecommunications. Future research could extend the analysis by adopting sectoral FDI data to examine heterogeneous investment responses across industries.
2. Tax concessions were proxied using the tax revenue gap, which captures the aggregate fiscal cost of exemptions, holidays, and reliefs. Although this proxy is consistent with the literature and data availability in Nigeria, it does not distinguish between different types of tax incentives or their sectoral targeting. Subsequent studies could disaggregate tax concessions using firm-level or sector-level incentive data to assess differential

effectiveness, especially in light of the Economic Development Incentive (EDI) introduced under the Nigeria Tax Reform Acts 2025.

3. The study adopted a short-run ARDL framework following the absence of a long-run cointegrating relationship among the variables. While this approach was methodologically appropriate, it limits the interpretation of long-run tax-investment elasticities. As Nigeria's tax system stabilises under the Tax Reform Acts 2025, future research could re-examine the tax-FDI nexus over an extended pre-and post-reform period to determine whether long-run relationships emerge.

REFERENCES

Abdurahman, E., Olumide, O. & Akangbe, O.L. (2021). Implications of tax incentives on foreign direct investment decisions. *International Bar Association***.**www.fdiintelligence.com, accessed 9 November 2021.

Abille, A. B., Mpuure, D. M.-N., Wuni, I. Y., & Dadzie, P. (2020). Modelling the synergy between fiscal incentives and foreign direct investment in Ghana. *Journal of Economics and Development, 22*(2), 325-334. doi: 10.1108/jed-01-2020-0006

Adegbite, E., & Akintoye, I. R. (2017). Ownership structure and corporate performance in Nigeria. Corporate Governance: *The International Journal of Business in Society, 17*(2), 255-273.

Adeleke, O., & Adejoh, E. (2010). Foreign direct investment and economic growth in Nigeria. *African Journal of Economic Policy, 17*(2), 45-67.

Adeleke, O., & Ezeabasili, V. (2021). Tax incentives and industrial performance in Sub-Saharan Africa. *Journal of African Business, 22*(3), 389-406.

Afuberoh, D & Okoye, M. (2014). The impact of taxation in revenue generation in Nigeria: A study of federal capital territory and selected states. *Journal of Public Administration and Management Research, 2*(2), 22-47

Ajide, K. B., & Raheem, I. D. (2016). Institutions-FDI nexus in Sub-Saharan Africa. *Economic Change and Restructuring, 49*(4), 417-440.

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes, 50*(2), 179-211.

Akam, C. A., Ohaka, J., & Ikegwuru, M. (2023). Tax Incentives and Foreign Direct Investment of Listed Oiland Gas Companies in Nigeria. *International Journal of Business & Entrepreneurship Research,14*(*6*)105 - 122. DOI: 272614523711467.

Alade, F.O & Elosiuba,G.E (2024). The interplay between tax incentive and foreign direct investment in Nigeria. *AAU Journal of Business Educator4*(2), 96-104

Alege, P. O., & Adeyemi, P. A. (2021). Taxation and foreign investment inflows in Nigeria. *Journal of Accounting and Taxation, 13*(2), 23-35.

Amoako, G. K. (2013). Relationship marketing, customer satisfaction and loyalty: Evidence from the banking sector. *International Journal of Business and Social Science, 4*(7), 247-254.

Anyanwu, J. C. (2012). Why does foreign direct investment go where it goes? New evidence from African countries. *Annals of Economics and Finance, 13*(2), 425-462.

Appiah-Kubi, S.N.K., Malec, K., Phiri, J., Maitah, M.,Gebeltová, Z., Smutka, L., Blazek, V., Maitah, K. &Sirohi, J. (2021).Impact of tax Incentives on foreign direct investment:

Evidence from Africa. *Journal of Sustainability 13*(2021),1-12. https://doi.org/10.3390/su13158661

Atolagbe, S & Abiodun, A.A. (2022). Impact of some Macroeconomic Variables on Tax Revenue in Nigeria.*Nigerian Journal of Basic and Applied Sciences, 29*(2):17-29.

Barro, R. J. (1991). Economic growth in a cross section of countries. *Quarterly Journal of Economics, 106*(2), 407-443.

Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. *Journal of Financial Economics, 58*(1-2), 261-300.

Bingham, T., & Bell, R. (2015). Managing performance through reward systems. Oxford University Press.

Blomström, M., & Kokko, A. (2003). *The economics of foreign direct investment incentives.* NBER Working Paper Series.

Buffum, M. D. (2015). Performance management: Putting research into action. Association for Supervision and Curriculum Development.

Bweseh, B.M.,Maihankali, M. &Galadima, K.R.(2021). Impact of Tax Incentives and Foreign Direct Investment on ManufacturingCompanies in Nigeria. *International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences9*(2),25-33· DOI: 10.37082/IJIRMPS.2021.v09i02.003

Chai, J., & Goyal, R. (2004). *Tax Concessions and Foreign Direct Investment in the ECCU.* IMF Working Paper (Washington: International Monetary Fund)

Clark, S. (2005). Tax reforms in MENA countries. Working Paper, 3MENA OECD-investment Programme

Clarke, G. R. G. (2007). *How does the investment climate affect firm performance? Evidence from Africa.* World Bank Policy Research Working Paper.

Cochrane, J. H. (1999). Portfolio advice for a multifactor world. *Economic Perspectives, 23*(3), 59-78.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches (5th ed*.). Sage Publications.

Daniel, P., Keen, M., & McPherson, C. (2010). The *Taxation of Petroleum and Minerals: Principles, Problems and Practice*. Routledge.

Danjuma, A. (2021). Insurgency, Political Risk, and Foreign Direct Investment Inflows in Nigeri a: A Sectorial Analysis, *Central Bank of Nigeria Journal of Applied Statistics12*(2):27-57. DOI:10.33429/Cjas.12221.2/5

Dare, C., Du Plessis, S. & Jansen, A. (2019). Tax revenue mobilisation: Estimates of South Africa's personal income tax gap. *South African Journal of Economic and Management Sciences, 22(*1), a2817. https://doi.org/10.4102/sajems.v22i1.2817

De Mooij, R. A., & Ederveen, S. (2008). *Corporate tax policy and international trade*. International Tax and Public Finance.

Dunning, J. H. (1988). The eclectic paradigm of international production. *Journal of International Business Studies, 19*(1), 1-31.

Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: Past, present and future. *International Journal of the Economics of Business, 8(*2), 173-190.

Easson, Alex; Zolt, Eric. Tax Incentives(PDF). Law Review.

Ejemeyovwi, J. O., Osabuohien, E. S., Johnson, O. D., & Bowale, E. I. (2019). Internet usage, innovation and human development nexus in Africa. *Journal of Economic Structures, 8*(1), 1-21.

Emediegwu, L.E.,&Edo, S.(2021).The effect of corruption on foreign direct investment in West African Sub-Region.*West African Financial and Economic Review, 17*(2), 119-140.

Eneche, S. F., & Sukana, D. T. (2025). Fiscal policy and foreign direct investment in nigeria. *African Banking and Finance Review Journal*, *20*(7), 83-99. Retrieved from http://www.abfrjournal.com/index.php/abfr/article/view/359

Etim, R.S., Mfon,S.J.,Ofonime, O.J. (2019). Attracting Foreign Direct Investment (FDI) In Nigeria through Effective Tax Policy Incentives. *International Journal of Applied Economics Finance and Accounting 4*(2):36-44. DOI:10.33094/8.2017.2019.42.36.44

Federal Inland Revenue Service (FIRS) (2022). National Tax Policy of Nigeria.

Federal Republic of Nigeria. (2025). Nigeria Tax Act, 2025 (Act No. 7). National Assembly of the Federal Republic of Nigeria. Available at: Official government publication.

Ferguson, D.,Krupa, T.J., Laux, R.C.(2025) Tax administration quality and foreign investment in developing countries: Evidence from participation in tax inspectors without borders. *Journal of Accounting and Economics.*https://doi.org/10.1016/j.jacceco.2025.101832 Available online 29 August 2025

Fletcher, R. (2002). The role of taxation in attracting foreign direct investment. *International Tax Journal, 28*(4), 1-15.

Gaspareniene, L., Kliestik, T., Sivickiene, R., Remeikiene, R., & Endrijaitis, M. (2022). Impact of foreign direct investment on tax revenue: the case of the european union. *Journal of Competitiveness, 14*(1), 43-60. https://doi.org/10.7441/joc.2022.01.03

Gbogbo, S., & Agyei, S. K. (2023). Tax incentives and foreign direct investment in developing economies. *Journal of Economics and Development Studies, 11*(2), 45-61.

George, D., & Mallery, P. (2019). IBM SPSS statistics 25 step by step: A simple guide and reference. Routledge.

George, T., & Bariyima, D. (2015). Tax incentives and foreign direct investment in Nigeria. *Journal of Economics and Finance, 6*(5), 10-20

Gujarati, D. N., & Porter, D. C. (2009). Basic econometrics (5th ed.). McGraw-Hill.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis (*8th ed.). Cengage Learning.

Hausmann, R., Hwang, J., & Rodrik, D. (2007). What you export matters. *Journal of Economic Growth, 12*(1), 1-25. https://www.researchgate.net/publication/344877572

Hutton, E. (2017). The Revenue Administration-Gap Analysis Program: Model and methodology for value-added tax gap estimation. *International Monetary Fund: Technical Notes and Manuals, 17*(04), 1-28. https://doi.org/10.5089/9781475583618.005

International Monetary Fund [IMF]. (2014).*Government finance statistics manual 2014*. International Monetary Fund.

Islam, M. A., Khan, M. A., Popp, J., & Sroka, W. (2019). Foreign direct investment and economic growth: Evidence from developing countries. *Journal of International Trade & Economic Development, 28*(3), 313-332.

Jensen, Nathan M.; Malesky, Edmund J. (2018). *Incentives to Pander: How Politicians Use Corporate Welfare for Political Gain*. Cambridge University Press. doi:10.1017/9781108292337. ISBN 978-1-108-41890-4.

Johnston, D. (2003). *International Exploration Economics, Risk, and Contract Analysis*. PennWell Books.

Joseph, F.I., Omodero, C.O., & Omeonu, O.M. (2019). The Role of Tax Revenue and Foreign Direct Investment in Promoting Economic Progress in Nigeria.*Annals of Spiru Haret University*. Economic Series, 19(3), 33-54, doi: https://doi.org/10.26458/1932

Justman,M., Thisse,J., & Van Ypersele.T. (2005). Fiscal competition and regional differentiation. Regional Science and Urban Economics, 35(6), 848-861.

Karimi, J.W& Wanjohi,F. M.(2024).Tax incentives and financial performance of manufacturing firms in Nairobi city county Kenya. *The Strategic Journal of Business & Change Management 11*(2),253 - 278.DOI: http://dx.doi.org/10.61426/sjbcm.v11i2.2907

Keen, M., & Mansour, M. (2010). *Revenue Mobilization in Sub-Saharan Africa: Challenges from Globalization*. IMF Working Paper.

Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.

KPMG. (2020). Nigeria tax incentives and investment guide. KPMG International.

Kubaje, T.A., Amoasi-Andoh, R.Eklemet, I., Wassan, S.N.(2025).Foreign direct investments, tax revenue, and economic growth in Sub-Saharan Africa: does maximum tax apply.Cogent Economics and Finance, 13(1),52-89 https://doi.org/10.1080/23322039.2024.22446651

Kusumaningtyas, R. O. & Kalimanzilahe, J. (2023). Impact of Tax Incentive on Increase Foreign Direct Investment*Journal of Sustainable Development and Regulatory Issues, 1* (2), 51-63

Kyari, A. K. (2020). The impact of petroleum tax incentives on foreign direct investment inflow: Evidence from Nigeria. *International Journal of Energy Economics and Policy*,*10*(4), 516-524.

Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics, 22*(1), 3-42.

McDonald, B.D.; Decker, J.W.; Johnson, B.A.M. (2020). You don't always get what you want: The effect of financial incentives on state fiscal health. *Public Administration Review.(3),*365-374. doi:10.1111/puar.13163.

McDonald, S., & Majeed, M. T. (2011). Financial development and foreign direct investment. *Journal of Economic Studies, 38*(3), 259-272.

Morisset, J., & Pirnia, N. (2001). *How tax policy and incentives affect foreign direct investment*. World Bank Policy Research Working Paper.

Musangi, J. P. (2021). Tax policy reforms and investment growth in Sub-Saharan Africa. African *Journal of Economic Policy, 28*(1), 89-108.

Musgrave, R. A. (1959). The Theory of Public Finance. McGraw-Hill.

Musgrave, R. A., & Musgrave, P. B. (1989). *Public Finance in Theory and Practice*. McGraw-Hill.

Nguyen, H. T., Nguyen, H. T., & Nguyen, T. T. (2018). Tax incentives and foreign investment: Evidence from developing countries. *Journal of Asian Economics, 56*,(6) 1-10.

Nwankwo, G. C., & Okoro, E. (2025). Effect of tax incentives on foreign direct investment (FDI) in Nigeria. *Journal of Accounting, Business and Social Sciences, 9*(1), 1-22.

Nwankwo, G.C. & Okoro, E. (2025). Effect of tax incentives on foreign direct investment (FDI) inNIGERIA. *(Jabss) Journal of Accounting, Business and Social Sciences, 9*(1), 245-256

OECD (2019). Tax Policy Reforms: OECD and Selected Partner Economies. OECD Publishing.

OECD (2021). *Corporate Tax Statistics: Fourth Edition*. OECD Publishing.

OECD. (2015). Measuring and analysing the impact of tax incentives. OECD Publishing.

OECD. (2020). Tax policy reforms and investment. OECD Publishing.

OECD. (2023). Tax incentives and foreign direct investment. OECD Publishing.

Ogbonnaya, V. O., Ujah, I. P., Onuche, S. J. E., & Ekwe, M. C. (2025). Analysis of the Effect of Company Income Tax Policies and Foreign Direct Investment (FDI) in Nigeria. *Journal*

of Research in Management and Social Sciences, *11*(1), 214-229. Retrieved from https://jormass.com/journal/index.php/jormass/article/view/85

Okoi, W., & Edame, E. (2013). The impact of taxation on economic development in Nigeria. Academic Journal of Interdisciplinary Studies, 3(4), 209-218 .

Okoth, E.(2023). Effect of tax incentives and subsidies on economic growth and developing Economies. *International Journal of Research and Innovation in Social Science, 7*(7). 567-581. DOI: https://dx.doi.org/10.47772/IJRISS.2023.70744

Okoye, L. U., & Benjamin, O. (2015). Tax incentives and investment performance in Nigeria. *Journal of Accounting and Taxation, 7*(5), 95-104.

Olaniyi,A.Z., Ajayi, R.O. & Oyedokun, G.E.(2018).Tax policy incentive and foreign direct investment. *Fountain University Osogbo Journal of Management,3(3), 59 - 71*

Ong, T., Wong, K., & Teh, B. (2012). Corporate tax and foreign direct investment in developing countries. International Journal of Business Management and Economic Resources, 3(1) ,471- 479.

Organisation for Economic Co-operation and Development [OECD]. (2010). *Tax expenditures in OECD countries*. OECD Publishing.

Oruwari, N. (2022). Taxation and foreign direct investment inflow in Nigeria. *International Journal of Humanities and Social Science*, *8*(2), 46-52

Oyedokun, G. E., Babalola W. A. & Awosika, M. .(2020). *Imperative of Tax Incentives in Nigeria*. Tax Management and Compliance in Nigeria. PP 307-342

Ozgur, O., et al. (2019). Corporate taxation and foreign direct investment flows. *Economic Modelling, 78*,(3) 270-282.

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). *Bounds testing approaches to the analysis of level relationships*. *Journal of Applied Econometrics, 16*(3), 289–326. https://doi.org/10.1002/jae.616

Ruiz, I.C.(2005). Exchange Rate as a Determinant of Foreign Direct Investment: Does it Really Matter? TheoreticalAspects,Literature Review and Applied Proposal. *Ecos de Economía, 9*(2021), 154-171

Saidu, A. S. (2015). Corporate taxation and foreign direct investment in Nigeria. *European Journal of Accounting, Auditing and Finance Research,* 3(8), 17-24.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. London: PrenticeHall.

Schumpeter, J. A. (1954). *History of economic analysis*. Oxford University Press.

Slattery, Cailin; Zidar, Owen (2020). "Evaluating State and Local Business Incentives". *Journal of Economic Perspectives, 34* (2): 90-118. doi:10.1257/jep.34.2.90. ISSN 0895-3309.

Solow, R. M. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics, 70*(1), 65-94.

Stiglitz, J. E. (2000). Economics of the Public Sector. W.W. Norton & Company.

Tapang, A.T., Onodi, B.A.&Amaraihu, A.H.(2018). Effect of Tax Incentives on Foreign Direct Investment in the Petroleum Industry in Nigeria. *International Journal of Economics and Business Management 4* (7) ,30-39

Todaro, M. P., & Smith, S. C. (2011). Economic development (11th ed.). Pearson Education.

Tordo, S., Tracy, B. S., &Arf aa, N. (2011). *National Oil Companies and Value Creation*. World Bank Working Paper.

Ubahi, P. E., Okoro, C.E.& Ojukwu, C.O.(2025). Tax incentives and foreign direct investment (FDI) in Nigeria. *International Journal of Innovative Finance and Economics Research* 13(2):245-256, doi:10.5281/zenodo.15547273

Ugwu, J.I. & Okoye, G. (2018) Tax incentives and foreign direct investment (FDI): implication for export promotion in Nigeria, Ghana and South Africa, post IFRS adoption. *International Journal in Management and Social Science, 6*(9), 56-87

UNCTAD (2020). World Investment Report. ADB (2018). Excise Tax Reforms and Investment Trends in Southeast Asia. European Commission (2021). Evaluation of the EU Excise Duty Framework. Would you like this as a formatted PDF or Word document for submission? 14:16

United Nations Conference on Trade and Development. (2023). *World investment report 2023: Investing in sustainable energy for all*. United Nations.

World Bank (2020). Domestic Revenue Mobilization Strategy. World Bank Group.

World Bank (2020). *Excise Taxation in Developing Countries*. World Bank Publications

World Bank. (2020). World development indicators. World Bank Publications.

Zeng, S.,Ji, M. &Huang, X. (2025). An empirical study on the impact of tax incentives on the development of new energy vehicles: Case of China. *Energy Policy 198* (2025) 114452 https://doi.org/10.1016/j.enpol.2024.114452

Zodrow, G. R. (2010). *Capital Mobility and Source-Based Taxation of Capital Income in Small Open Economies*. International Tax and Public Finance.

APPENDIX 1 (Main Results) STATA 19 Outputs

Descriptive Statistics

```
. tabstat fdi taxc ced ppt cit vat exr cor, stat(mean median min max sd n)
```

stats	fdi	taxc	ced	ppt	cit	vat	exr	cor
mean	1.208406	17904.85	726.265	1458.088	1031.472	878.7968	222.6419	21.62069
p50	1.069539	10437.04	297.5	1349.5	595.182	481.407	148.88	24
min	-.0288728	424.77	18.095	24.6	12.275	7.261	21.88442	1
max	2.900249	61672.63	6105.398	4209.017	8386.51	6721.36	1480.179	28
sd	.8857014	18695.1	1229.786	1198.829	1692.927	1360.127	271.5579	6.131964
N	31	31	31	31	31	31	31	29

Bound Test

```
. estat ectest

Pesaran, Shin, and Smith (2001) bounds test

H0: no level relationship                                   F =     2.025
Case 3                                                      t =    -0.342

Finite sample (7 variables, 29 observations, 4 short-run coefficients)

Kripfganz and Schneider (2020) critical values and approximate p-values
```

	10%		5%		1%		p-value	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
F	2.433	3.914	2.999	4.733	4.467	6.836	0.168	0.504
t	-2.467	-4.070	-2.874	-4.595	-3.734	-5.713	0.817	0.972

```
do not reject H0 if
    either F or t are closer to zero than critical values for I(0) variables
      (if either p-value  > desired level for I(0) variables)
reject H0 if
    both F and t are more extreme than critical values for I(1) variables
      (if both   p-values < desired level for I(1) variables)

decision: no rejection (.a), inconclusive (.), or rejection (.r) at levels:
```

	10%	5%	1%
decision	.a	.a	.a

MODEL 1 (Short-run)

```
. reg D.ln_fdi D.ln_taxc D.ln_ced D.ln_ppt D.ln_cit D.ln_vat D.ln_exr cor L.D.ln_fdi
```

Source	SS	df	MS		
Model	.966785097	8	.120848137	Number of obs	= 29
Residual	.898142815	20	.044907141	F(8, 20)	= 2.69
				Prob > F	= 0.0346
Total	1.86492791	28	.066604568	R-squared	= 0.5184
				Adj R-squared	= 0.3258
				Root MSE	= .21191

D.ln_fdi	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ln_taxc						
D1.	.0819061	.4292757	0.19	0.851	-.8135473	.9773595
ln_ced						
D1.	.2074065	.2676204	0.78	0.447	-.3508398	.7656528
ln_ppt						
D1.	-.0204418	.0930648	-0.22	0.828	-.2145716	.1736881
ln_cit						
D1.	.0144384	.2489449	0.06	0.954	-.5048516	.5337284
ln_vat						
D1.	-.3498792	.4464723	-0.78	0.442	-1.281204	.5814457
ln_exr						
D1.	.5442062	.1505022	3.62	0.002	.2302641	.8581484
cor	-.0081786	.0084327	-0.97	0.344	-.0257688	.0094116
ln_fdi						
LD.	-.1698383	.1574474	-1.08	0.294	-.4982677	.1585912
_cons	.118481	.2480966	0.48	0.638	-.3990395	.6360015

Serial Correlation test

```
. estat bgodfrey, lags(1)
```

Breusch-Godfrey LM test for autocorrelation

lags(*p*)	chi2	df	Prob > chi2
1	2.464	1	0.1165

H0: no serial correlation

Model 2: (Moderated Short-run model)

```
. reg D.ln_fdi D.ln_taxc D.ln_ced D.ln_ppt D.ln_cit D.ln_vat int_ced_taxc int_ppt_taxc int_cit_taxc
>  int_vat_taxc D.ln_exr cor L.D.ln_fdi
```

Source	SS	df	MS		
Model	1.42419266	12	.118682722	Number of obs	= 29
Residual	.440735253	16	.027545953	F(12, 16)	= 4.31
				Prob > F	= 0.0039
Total	1.86492791	28	.066604568	R-squared	= 0.7637
				Adj R-squared	= 0.5864
				Root MSE	= .16597

D.ln_fdi	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ln_taxc						
D1.	-1.939869	1.250844	-1.55	0.140	-4.59154	.7118022
ln_ced						
D1.	-.4631238	.4039899	-1.15	0.268	-1.319544	.3932966
ln_ppt						
D1.	.1077007	.1129697	0.95	0.355	-.1317844	.3471858
ln_cit						
D1.	-2.000598	.5869975	-3.41	0.004	-3.244977	-.7562186
ln_vat						
D1.	1.457526	.7900607	1.84	0.084	-.217328	3.13238
int_ced_taxc	4.683159	2.827282	1.66	0.117	-1.310411	10.67673
int_ppt_taxc	-.0518586	.7622588	-0.07	0.947	-1.667775	1.564058
int_cit_taxc	17.47024	4.9079	3.56	0.003	7.065955	27.87452
int_vat_taxc	-14.04889	6.27574	-2.24	0.040	-27.35286	-.7449123
ln_exr						
D1.	.561999	.1329029	4.23	0.001	.2802574	.8437405
cor	-.0192519	.008339	-2.31	0.035	-.0369298	-.001574
ln_fdi						
LD.	-.5421519	.1787545	-3.03	0.008	-.9210946	-.1632092
_cons	.5493664	.2301195	2.39	0.030	.0615348	1.037198

Normality test

```
. estat imtest

Cameron & Trivedi's decomposition of IM-test
```

Source	chi2	df	p
Heteroskedasticity	29.00	28	0.4125
Skewness	12.69	12	0.3923
Kurtosis	2.54	1	0.1107
Total	44.23	41	0.3369

VIF Test

```
. estat vif
```

Variable	VIF	1/VIF
ln_ced		
D1.	2.50	0.399324
ln_vat		
D1.	2.46	0.405901
ln_ppt		
D1.	1.73	0.578217
cor	1.67	0.599830
ln_fdi		
LD.	1.57	0.635808
ln_taxc		
D1.	1.56	0.642268
ln_cit		
D1.	1.37	0.730242
ln_exr		
D1.	1.31	0.762554
Mean VIF	1.77	

```
.
```

Heteroskedasticity Test

```
. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of D.ln_fdi

         chi2(1)      =     0.11
         Prob > chi2  =   0.7366
```

APPENDIX 2__Full Unit Root TestResults (AT LEVELS)

Augmented Dickey-Fuller (ADF) Unit Root Test (At levels)

Note: The summary of these results is that only the variable of "Corruption" is stationary at levels, while the rest are non-stationary at level. This already violates the Johansen VECM assumptions, but perfectly satisfies the ARDL-ECM requirements.

FDI (at levels)

```
. tsset year
        time variable:  year, 1994 to 2024
                delta:  1 unit

. dfuller ln_fdi, trend lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ———— Interpolated Dickey-Fuller ————
                    Test         1% Critical       5% Critical      10% Critical
                Statistic             Value             Value             Value
——————————————————————————————————————————————————————————————————————————————
 Z(t)             -1.858            -4.343            -3.584            -3.230
——————————————————————————————————————————————————————————————————————————————

MacKinnon approximate p-value for Z(t) = 0.6760
```

Exchange rate (at levels)

```
. dfuller ln_exr, trend lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ———— Interpolated Dickey-Fuller ————
                    Test         1% Critical       5% Critical      10% Critical
                Statistic             Value             Value             Value
——————————————————————————————————————————————————————————————————————————————
 Z(t)             -1.969            -4.343            -3.584            -3.230
——————————————————————————————————————————————————————————————————————————————

MacKinnon approximate p-value for Z(t) = 0.6181
```

Corruption (at levels)

```
. dfuller cor, lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ———— Interpolated Dickey-Fuller ————
                    Test         1% Critical       5% Critical      10% Critical
                Statistic             Value             Value             Value
——————————————————————————————————————————————————————————————————————————————
 Z(t)             -3.245            -3.723            -2.989            -2.625
——————————————————————————————————————————————————————————————————————————————

MacKinnon approximate p-value for Z(t) = 0.0175
```

```
. dfuller ln_taxc, trend lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)             -0.802           -4.343            -3.584           -3.230
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.9655

.
. dfuller ln_ced,  trend lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)             -0.785           -4.343            -3.584           -3.230
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.9669

.
. dfuller ln_ppt,  trend lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)             -2.009           -4.343            -3.584           -3.230
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.5966

.
. dfuller ln_cit,  trend lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)             -1.544           -4.343            -3.584           -3.230
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.8135

.
. dfuller ln_vat,  trend lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        29

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)             -0.831           -4.343            -3.584           -3.230
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.9630
```

APPENDIX 3__Full Unit Root Test Results (At FIRST DIFFERENCE)

FDI (at first diff)

```
. dfuller D.ln_fdi, lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        28

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -4.766           -3.730            -2.992           -2.626
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0001
```

Exchange rate (at first diff)

```
. dfuller D.ln_exr, lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        28

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -3.170           -3.730            -2.992           -2.626
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0218
```

CIT (at first difference)Note: CIT is stationary at first difference after applying the Phillips-Perron test method of Unit Root Test

```
. pperron D.ln_cit, lags(1)

Phillips-Perron test for unit root                 Number of obs   =        29
                                                   Newey-West lags =         1

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(rho)         -24.083          -17.472           -12.628          -10.280
 Z(t)            -4.331           -3.723            -2.989           -2.625
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0004
```

```
. dfuller D.ln_taxc, lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        28

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -4.313           -3.730            -2.992           -2.626
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0004

.
. dfuller D.ln_ced,  lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        28

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -3.841           -3.730            -2.992           -2.626
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0025

.
. dfuller D.ln_ppt,  lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        28

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -5.537           -3.730            -2.992           -2.626
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0000

.
. dfuller D.ln_cit,  lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        28

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -2.171           -3.730            -2.992           -2.626
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.2170

.
. dfuller D.ln_vat,  lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        28

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -2.919           -3.730            -2.992           -2.626
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0431
```

APPENDIX 4__ (The Dataset)

YEAR	FDI, net inflows (% of GDP)	FDI, net inflows (BoP, current US$)	FDI (₦' Billions)	Statutory Tax Revenue	Tax Concessions (₦' Billions)	Total Tax Revenue (₦'billion)	Custom and Excise Duties (₦'billion)	PPT (₦'billion)	CIT (₦'billion)	VAT (₦'billion)	Exchange rate (₦/US$, period average)	Corruption (CPI_Ngr.)
1994	2.4368523	1,959,219,858	43,095.00	530.54	424.77	105.77	18.095	42.803	12.275	7.261	21.996	.
1995	0.2383215	335,842,165	7,353.35	925.64	780.23	145.41	37.364	42.858	21.878	20.761	21.895258	.
1996	0.2688183	499,276,809	10,926.39	1,219.38	1,018.26	201.12	55.000	47.500	23.100	32.500	21.884425	1
1997	0.2337944	469,577,020	10,277.19	1,318.75	1,112.43	206.32	63.000	64.300	27.800	35.300	21.88605	18
1998	0.137154	299,566,658	6,556.32	1,434.08	1,216.51	217.57	57.700	24.600	33.300	37.600	21.886	19
1999	1.6990689	1,004,915,631	92,792.00	1,638.40	1,284.87	353.53	87.900	71.100	46.200	47.800	92.3381	16
2000	1.648321	1,140,167,556	115,952.00	2,110.37	1,349.67	760.7	101.500	334.500	53.300	58.000	101.69733	12
2001	1.6186156	1,190,618,644	132,434.00	2,454.58	1,453.48	1001.1	170.600	407.100	69.400	91.700	111.23125	15
2002	1.9715841	1,874,070,753	225,972.00	3,438.43	2,636.21	802.22	181.400	224.400	89.100	108.600	120.57816	16
2003	1.9146206	2,005,353,563	259,136.50	4,060.38	2,913.26	1147.12	195.500	438.000	114.800	136.400	129.22235	14
2004	1.3803739	1,874,060,887	249,040.25	5,412.45	3,693.21	1719.24	217.200	878.600	130.800	163.300	132.88803	16
2005	2.8362941	4,982,533,930	654,078.82	6,918.31	4,396.79	2521.52	232.800	1,352.200	170.200	192.700	131.27433	19
2006	2.0357527	4,854,353,979	624,520.73	9,203.29	6,473.34	2729.95	177.700	1,349.500	246.700	232.700	128.65167	22
2007	2.1691954	6,036,021,405	759,380.43	10,502.24	8,060.10	2442.14	241.400	1,132.000	332.400	312.600	125.80811	22
2008	2.4137392	8,194,071,895	971,543.79	12,075.17	8,184.14	3891.03	281.300	2,060.900	420.600	401.700	118.56667	27
2009	2.9002487	8,555,990,007	1,273,815.79	13,176.27	10,437.04	2739.23	297.500	939.412	595.182	481.407	148.88	25
2010	1.6420737	6,026,253,091	905,730.77	16,547.32	12,948.39	3598.93	309.200	1,480.364	658.503	564.892	150.2975	24
2011	2.1331177	8,841,062,051	1,360,307.91	19,131.26	14,502.79	4,628.48	438.300	3,070.591	654.448	659.154	153.8625	24
2012	1.5237823	7,069,908,428	1,113,510.58	21,922.63	16,914.98	5,007.65	438.300	3,201.320	820.566	710.555	157.5	27
2013	1.0695394	5,562,857,987	875,102.46	24,546.15	19,740.51	4,805.64	424.493	2,666.367	963.451	802.684	157.31167	25
2014	0.8174785	4,693,828,632	744,218.93	27,311.51	22,596.95	4,714.56	449.626	2,453.947	1,173.491	802.965	158.55264	27
2015	0.6215016	3,064,168,904	589,669.69	28,463.47	24,721.71	3,741.76	474.760	1,289.961	1,268.977	767.334	192.44033	26
2016	0.8533957	3,453,258,408	875,373.38	30,772.59	27,465.13	3,307.46	499.894	1,157.808	933.537	828.199	253.492	28
2017	0.6421829	2,412,974,916	737,863.86	34,469.80	30,441.85	4,027.95	525.027	1,520.482	1,215.057	972.348	305.79011	27

2018	0.1838215	775,247,400	237,290.58	38,726.25	33,405.36	5,320.89	884.760	2,467.581	1,340.329	1,108.041	306.08369	27
2019	0.3449612	2,305,099,812	707,483.43	43,691.81	38,429.89	5,261.92	1,005.490	2,114.268	1,604.699	1,189.981	306.92095	26
2020	0.3984848	2,385,277,666	855,863.38	46,523.29	41,571.06	4,952.22	1,094.084	1,516.993	1,275.381	1,531.171	358.8108	25
2021	0.5439091	3,313,210,000	1,324,227.93	52,857.88	46,455.17	6,402.71	2,240.880	2,008.450	1,747.990	2,072.850	399.68126	24
2022	-0.028873	-186,792,429	-79,175.45	60,706.89	50,527.54	10,179.35	1,983.489	4,209.017	2,649.191	2,511.518	423.8686	24
2023	0.3841952	1,872,520,530	1,210,440.42	70,559.60	58,221.93	12,337.67	3,224.554	2,715.200	4,896.470	3,639.32	646.42304	25
2024	0.4282497	1,080,310,701	1,599,052.73	83,375.37	61,672.63	21,702.74	6,105.398	3,918.610	8,386.51	6,721.360	1480.1786	26

Sources: https://stats.oecd.org; https://www.firs.gov.ng; CBN Statistical Database (2026) www.cbn.gov.ng/; World Bank Open Database