

ABSTRACT

This study evaluates the effect of government consumption expenditure on Nigeria's economic growth from 2013 to 2023, using inflation rate, interest rate, and budget deficit as control variables. The main aim is to determine how government consumption spending influences GDP growth during the decade marked by economic reforms, oil price fluctuations, and fiscal adjustments. The objectives are to analyse the relationship between government consumption expenditure and GDP growth, and to examine how inflation, interest rate, and fiscal deficits interact with this relationship. The scope is limited to Nigeria, with data drawn from 2013 to 2023 to capture recent macroeconomic trends. The dependent variable is GDP growth, while the independent variable is government consumption expenditure, and the control variables are inflation, interest rate, and budget deficit. A quantitative research method was adopted, using annual time series data analysed through the Autoregressive Distributed Lag (ARDL) approach to identify both short-run and long-run effects. The findings show that government consumption expenditure positively influences GDP growth, but its impact is weakened by rising inflation and persistent fiscal deficits. Interest rate variations were found to have a marginal effect, depending on the investment environment. The study concludes that strategic allocation of government consumption spending can support sustainable growth if complemented by stable macroeconomic policies. It recommends improving fiscal transparency, reducing waste in recurrent expenditure, and maintaining price stability to maximise the growth effects of public consumption.

Keywords: government consumption expenditure, GDP growth, inflation, interest rate, budget deficit, Nigeria.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Government spending plays a big role in shaping how economies grow all over the world, and this has caused many arguments among economic thinkers. The idea from Keynesian economics says that when economies slow down, governments should increase spending to help bring back demand and jobs. Ogundipe & Oluwatobi (2013) also talked about this view. But then, Classical and Neoclassical economists see a problem with this. They say spending too much might stop private investors from acting because it could push them out, and that can hurt growth later (d'Agostino et al., 2016). These opposite views show that how much is spent, when it is spent, and where the money goes are all important to help the economy grow.

Still, in places that are developing, using government spending to help the economy is hard. There are many obstacles like not having enough resources, financial systems that are not strong, and weak institutions that cannot carry out plans properly. Samargandi et al., (2015) said that in countries with middle income, financial development and growth do not always go together easily. Also, Rodríguez-Pose and Garcilazo (2015) explained that when governance is weak, the spending does not work well, even when plans are good. So, spending needs to be planned well and done with strong systems in countries like Nigeria where development is difficult. Nigeria's economy has many opportunities but also many problems. Some signs include GDP going up and down often, too many people without jobs, and a lot of poverty (Ibrahim, 2021). To fix these things, there must be a focus on growth that lasts long, plans that reduce poverty, and development of people through health and education. Ogundari & Awokuse (2018) also showed that spending on health and education helps economies in Sub-Saharan Africa to grow.

Then, between 2013 and 2023, Nigeria's government changed how it spent its money. What it focused on changed from one sector to another. Looking at capital and recurrent spending compared to GDP shows this change. Cojocaru et al., (2016) said that a strong financial system must be built for real growth to happen. At the same time, Zhang et al., (2021) pointed out that many countries are now more focused on development that can last for a long time. This global concern also affects how money is spent. These changes are useful for looking at whether Nigeria's public spending matches its development goals in this time period. Also, the way Nigeria makes fiscal plans and does budgeting has a big role in its economy. The country depends a lot on oil for money, and this affects both how much it earns and where it spends it. Gründler & Potrafke (2019) said corruption is a big problem that makes public spending not work well, which then stops growth. Broadberry et al., (2015) also showed that good control of public finances is needed to keep development going. This shows that Nigeria must manage its revenue and debts carefully to get better results.

Government consumption spending touches different parts of the economy like demand, jobs, inflation, and how much is invested. Mazzucato (2018) said that to measure value well, it is important to look at how both production and consumption work together. Baloch et al., (2021) also talked about how financial growth, energy innovation, and environmental issues are linked. So when checking public outflow, it is not just about what gets made quickly, but how such use of money turns the whole economy in different ways. Past reviews in Nigeria on this matter do not all line up. Meyer and Shera (2017) showed that some public outflow can push growth forward. Yet Akadiri et al. (2018) pointed out that the result shifts based on which part of the economy gets the funds and how clean the process runs. This split in results proves that the tie between outflow and growth is far from straight, and extra review is still required.

It is also not easy to trace how public consumption outflow truly shapes growth in Nigeria due to many setbacks. Vigo et al. (2019) observed that corrupt handling drags money away from the main need, cutting down its power to work well. Agénor & Canuto (2015) also showed how unequal systems can change how the economy grows. Meyer & Shera (2017) again pointed out that poor institutions and wrong spending choices also cause more problems. These problems must be studied properly. So, this work will try to find out how government consumption expenditure has affected Nigeria's economic growth from 2013 to 2023, and it will give useful ideas for making better fiscal policy.

1.2 Statement of the Problem

Government expenditure in Nigeria is large, but it has not always led to the kind of economic growth the country aims for. For example, back in 2013, the total government spending was ₦4,560.81 billion, but most of it went to recurrent costs ₦3,007.51 billion while only ₦958.00 billion was for capital projects (Central Bank of Nigeria, 2013). This shows a clear imbalance. Too much was spent on things that keep the government running, and too little was used on things that help the economy grow in the long run. This problem makes people worry about how well the money is being used and whether the spending is helping or just being wasted (Udude et al., 2023). Even though some fiscal policies were made to fix this by putting more money into capital investment, the fact that recurrent costs stayed high means these changes didn't work very well. This brings up a bigger issue: what are the real reasons for how the government chooses to spend, and are those choices helping or hurting the country's future? Also, outside problems like changes in global oil prices make it harder. Nigeria depends a lot on oil money, so when oil prices fall, there's less to spend, and that makes planning even more difficult.

Then in 2023, President Tinubu introduced economic reforms. These included taking away fuel subsidies and changing the value of the naira (Mbachu & Pilling, 2023). These actions tried to fix Nigeria's budget problems and help the economy. At first, the World Bank said there were some good effects, like the budget deficit going down from 6.2% to 4.4% of GDP (Akwagyiram, 2024). But at the same time, prices went up. Life got more expensive, and people had less money to spend. That could slow the economy down again. The government has tried to deal with the bad side effects by creating social help programs and moving funds to sectors that can grow. But these steps have not really fixed things yet. For example, reports say Lagos's nightlife is fading, which shows how much the cost of living has changed people's behavior (Egbejule, 2024). This situation makes it important to look deeper into what these reforms are doing, both now and later on, especially for growth and living conditions. The studies done before about spending and growth in Nigeria do not really explain this recent time and these new reforms well. Because of this, this research aims to look at how government consumption expenditure affected economic growth in Nigeria from 2013 to 2023.

1.3 Objectives of the Study

The broad objective of this study is to evaluate the impact of government consumption expenditure on Nigeria's economic growth from 2013 to 2023. The specific objectives are:

1. To analyze the relationship between government consumption expenditure (GCE) and the GDP growth rate in Nigeria.
2. To examine the influence of inflation rate (INFR) on the GDP growth rate in Nigeria.
3. To investigate the effect of interest rate (INTR) on the GDP growth rate in Nigeria.
4. To assess the impact of government budget deficit (GBD) on the GDP growth rate in Nigeria.

1.4 Research Questions

From the above research objectives, the following research questions were raised:

1. What is the relationship between government consumption expenditure (GCE) and the GDP growth rate in Nigeria?
2. How does inflation rate (INFR) influence the GDP growth rate in Nigeria?
3. What is the effect of interest rate (INTR) on the GDP growth rate in Nigeria?
4. What is the impact of the government budget deficit (GBD) on the GDP growth rate in Nigeria?

1.5 Research Hypotheses

The following hypotheses will be tested:

1. H_{01} : There is no significant relationship between government consumption expenditure (GCE) and the GDP growth rate in Nigeria
2. H_{02} : Inflation rate (INFR) has no significant influence on the GDP growth rate in Nigeria.
3. H_{03} : There is no significant effect of interest rate (INTR) on the GDP growth rate in Nigeria.
4. H_{04} : Government budget deficit (GBD) has no significant impact on the GDP growth rate in Nigeria

1.6 Significance of the Study:

The findings of this study will be useful to different groups in several ways.

First, those in the academic world and researchers will get more ideas about how government consumption expenditure connects with the way Nigeria's economy grows. This connection is not clear or easy. But learning more from this study can add to what is already known in books and past works about how fiscal policy behaves in countries that are still developing. It may also help other research works that will follow this path later.

Second, those who plan and make government rules especially in the Nigerian government can use the results of this study. The findings can help them create stronger and smarter fiscal policies. If they know better how spending changes things like economic growth, inflation, interest rate, and budget deficit, then they can choose more wisely how to share resources and balance the economy better.

Third, this study will be helpful to investors and also to businesses working in Nigeria. They can use the ideas from the findings to understand how public spending might change the general business environment. This can guide their decisions on where to put investments and how to move forward in business.

Fourth, ordinary citizens, the general public, will also benefit. The study can make it clearer how decisions about government spending affect everyday life. This can push more people to understand, ask questions, and support better ways of handling public finances that are more open and answerable to the people.

1.7 Scope of the Study:

This study is about the connection between government consumption expenditure (GCE) and economic growth in Nigeria during the years from 2013 to 2023. This time frame was picked because many important economic events happened then. There were sharp changes in oil prices and also some big policy changes made by the government. These kinds of events make it a good period to use when trying to see what effect government spending might have had. The study is only focused on Nigeria. That is because each country has its own kind of fiscal rules and economic situations. By looking only at Nigeria, the study can go deeper into what is really happening in that specific place. The results from this narrow focus will help make suggestions that match Nigeria's own conditions.

The way the study will be carried out is by using a quantitative research plan. It will collect and use time series data, which shows how the numbers for each variable moved from year to year. This kind of method is good for working with macroeconomic figures and helps in finding out if one variable causes a change in another one. In this case, the ARDL method is the one that will be used to do the analysis part.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Government Consumption Expenditure (GCE)

Government consumption expenditure (GCE), this type of spending is the one that government uses right away. It is not like the spending on roads or new schools that take years. It helps to give what people or the public need at the moment. It does not add new buildings or machines but helps with running costs. Like, it goes to pay salaries to civil servants, covers office supplies, pays rent for buildings used by ministries, and takes care of regular things like power and fuel. Subsidies are there too. In Nigeria, GCE also pays for army and police work, plus support for welfare and help programs. All this shows that the government spends GCE on services that go to the people every day. These are the things that keep the work of government happening all the time. That is why it matters to look at what is inside GCE. It helps people studying the economy to see if this kind of spending makes the economy grow or not. That is why it is important to measure it in the correct way when doing any serious economic study.

In Nigeria, GCE is often shown by taking it as part of the total output (GDP) or just as full figures in the national currency. Chandana et al., (2020) explain how it is done. They say most of the data comes from official places, like the CBN Statistical Bulletin. This bulletin gives the numbers and explains how the government puts the spending into different areas. But not all is simple. Ibrahim (2021) explains that in countries like Nigeria, things like corruption can change the truth in the data. When records are changed or hidden, the numbers can look wrong. So, the people who study these things must double-check what they use and compare with other sources. This helps to find out what is true. Also, the way budgets are written or grouped does not always stay the same. One

year it may be different from another, or from state to state. That makes it hard to compare or follow the changes in spending over time.

Economic Rationale for Government Consumption Expenditure (GCE):

The support for government consumption expenditure mostly comes from what it does mainly helping with public services and those shared goods that don't really come from private businesses easily. These include, for example, the country's defence, keeping law and order inside, schools run by the state, and hospital access that isn't just for those who can pay a lot (d'Agostino et al., 2016). At the same time, GCE can push the economy forward by increasing overall demand, especially when times are tough and activity slows down. When the government pushes out money to different sectors, it can lead to what people call a multiplier where one spending decision starts a chain, and then more things happen after it. So, this kind of spending might work as a sort of safety measure. It tries to hold the economy in place when things fall back, and also tries to stop jobs from disappearing too quickly. Still, there is no full agreement. Some thinkers prefer small government. They say the private market should grow the economy. Others say no the government should do more, especially where there are holes in the system or where the market leaves people behind.

Nyasha & Odhiambo (2019) pulled together a broad set of writings, both theory and data, to explore how state spending relates to economic movement. What they found is that there isn't one clear answer. The way GCE affects economic growth well, it changes. It can go up or not, based on things like the country itself, how the budget is planned, and what shape the economy is in overall. So, looking at GCE isn't a simple straight line. In Nigeria's case, it's even harder to figure. The government mostly depends on oil for its money. And then, there are old problems misuse of funds, low openness, and unclear financial processes. These make things blurry. Because of that,

the only way to study GCE in Nigeria is to go slow, check facts more than once, and think through how all the special problems inside the country affect what GCE does in the economy.

Types and Classifications of Government Consumption Expenditure (GCE)

Classifying government consumption expenditure using areas like sector divisions such as public education, healthcare delivery, and defence-related operations then also by vertical layers of governance like federal, state, and local authorities, and again by economic duty types including social welfare provision or infrastructure upkeep, gives useful breakdowns for policy reading (Nyasha & Odhiambo, 2019). These different groupings show that not all sectors give back the same result when it comes to influencing growth. Some have stronger growth impact than others. That kind of classification helps observers follow how shifting public fund allocations between those sectors might affect broader macroeconomic performance. Also, when the breakdown looks at which level of government is doing the spending, it becomes easier to judge if fiscal decentralisation is working well or just adding extra layers. This helps to see clearly whether financial decision-making and spending at each government level is helping or dragging down economic progress in the country.

The way funds are shared across the economic activity types also tells something about how growth results turn out. d'Agostino et al., (2016) pointed out that government spending and corruption tend to move together. Where corruption is high, the spending power of public expenditure may go down badly. Their findings make it clear that what matters is not just how much is spent, but also where and how. Productive spending areas, like when money goes into road building or formal education institutions, have a better link to growth. But unproductive items or the part lost due to misuse or rent-seeking behaviour lower that positive effect. In Nigeria, this matters even more. The system faces persistent corruption risks and has heavy dependence on oil-

based revenue. These domestic policy limitations make it important to study exactly how the funds are arranged across the economy and to ask whether GCE, under those specific challenges, can still support national growth in a meaningful way.

Challenges in Managing Government Consumption Expenditure (GCE)

Running government consumption expenditure (GCE) properly in Nigeria faces many troubles, such as public sector corruption, weak execution systems, and poor distribution of funds (Ibrahim, 2021). When corruption enters the process, it can move funds away from useful projects and basic public services. That shift weakens how much GCE can help economic growth or national development. Also, when public offices do not handle procurement or project delivery well, it causes costs to go up more than planned and slows the project timeline. This makes the whole use of money less helpful. Then there is the problem of wrong spending, where money does not go to the parts of the economy that truly boost growth. This kind of mismatch holds the economy back. To make GCE work better, it becomes necessary to improve how open and responsible the government is with money, and also to bring in strong systems that support good decision-making. Then again, how well public bodies can manage funds and carry out public projects plays a big role too. Rodríguez-Pose & Garcilazo (2015) showed that how much benefit comes from public investment depends on how good the government system is. Even if a project sounds useful on paper, it may still give little value if the way the institution works is not strong, or if funds do not go to the right places. Their research shows that it is not just about spending enough; it also matters whether the process is solid and honest. In Nigeria, where problems with financial discipline and policy enforcement are still major issues, this becomes a strong reason to look at how institutional control works side-by-side with the amount of money spent. For GCE to help Nigeria meet

development targets, these governance concerns cannot be ignored; they must be handled if growth is to last.

2.1.2 Economic Growth

Economic growth, how it is mostly described in macroeconomic discussions, refers to the rise that happens in the total real output of a national economy. This output includes both tangible goods and intangible services, but it must be calculated in real terms, which means price inflation is taken out, leaving the true adjusted economic value (Broadberry, Campbell, & Klein, 2015). The primary metric usually applied is the real Gross Domestic Product (GDP) growth rate. That indicator is used to show how the productive capacity of the economy expanded in a defined time span, without being confused by shifts in price levels. This way, comparisons across different fiscal periods become more reasonable. But GDP, although common and useful for that, still has limitations. It fails to show income distribution across socioeconomic groups. It also does not reflect whether environmental degradation is increasing or if ecological sustainability is being supported. It gives no account of improvements in human development or in social integration. These factors are also development indicators. When GDP is used alone, it ignores those areas. That is why other multidimensional metrics were introduced. One of them is the Human Development Index (HDI). HDI combines statistical data on public health systems, educational attainment, and standard of living. It aims to offer a broader developmental assessment not just about market expansion, but also human welfare and societal progress.

Because of this, the choice of economic growth indicator and the interpretation that comes with it becomes an essential policy concern. It shapes how national development narratives are framed and which fiscal or social strategies are selected. A study by Akadiri et al. (2018) showed that when government expenditure is directed towards human capital development, such as tourism

infrastructure and educational sector investment, it stimulates macroeconomic performance. Their findings support the idea that productive public investment in social sectors can generate economic returns. The research indicates that GDP alone cannot capture the full dimension of economic development. It shows that indicators like literacy rates, health care access, and quality of life hold equal value. But these human-centered metrics are harder to quantify. They require more complex data collection procedures and carefully selected developmental indicators that can reflect true changes in social welfare and national well-being not just in production volumes or consumption levels.

Determinants of Economic Growth

Many things help a country grow its economy. These include building up capital, improving technology, making workers better through education and health, having strong institutions, and keeping the economy stable (Samargandi et al., 2015). Capital building means putting resources into machines, tools, and also in workers through training. This helps the economy to produce more. Technology helps too. When new ways of doing things come in, output goes up while using fewer inputs. Then, making people smarter and healthier, like through teaching and hospitals, also helps them do better work. If the government works well and follows laws, this helps bring trust and order. This order makes it easier for investors to come in and do business. Keeping things like inflation and exchange rates steady helps companies plan and grow without sudden changes. These points all link together. One thing helps the other. But still, what matters most can change. One country might need better health, another might need more machines. It depends on the situation and how far along the country already is in its growth.

Also, the way money moves in a country matters. Financial development helps by taking saved money and putting it into things that grow the economy. Samargandi et al. (2015) tried to see if

this always works the same way. They found it doesn't. Sometimes, it helps more, and sometimes, not so much. It's not straight. So, the level of money system growth changes how much it helps the bigger economy. Their work shows that this topic is not simple. It needs to be studied carefully in each country. What works in one place may not work in another. This makes the whole subject of economic growth harder to fully explain and manage.

Types of Economic Growth

Economic growth is not just one thing. It comes in different types, and each one needs different kinds of government action. Short-run growth means there are ups and downs in how much the country produces. These changes usually happen because of cycles in the economy. Long-run growth is different. It means the economy keeps getting bigger and better for a long time. Then, there is inclusive growth. This type makes sure that more people, not just a few, enjoy the good parts of economic growth. It tries to make things fairer and bring down inequality. But exclusive growth does the opposite. It gives most of the benefits to only a few people, and that can make the gap between rich and poor worse. Sustainable growth is about more than just money. It looks at the environment and social effects. It tries to make sure growth today does not damage things for people tomorrow. Unsustainable growth, on the other hand, goes after fast economic results. But it does not care enough about future harm to the planet or to society. These types of growth are important to know. Policymakers must understand them well if they want to make good plans that lead to the right kind of growth.

Nyasha & Odhiambo (2019) looked at many research studies that talk about how government spending affects economic growth. They put the studies into three main groups. One group showed that public spending helps growth. Another group showed that it hurts. And the third one showed no strong link either way. This way of sorting the studies shows that government spending does

not always do the same thing. It depends on many things like which country, what year, what kind of spending, and how the study was done. This means people who study these topics or make economic policy need to look at everything closely. They need to understand the full picture. It also means that what works in one country might not work in another. So, policies must be made with care, using facts from each place, to get the best results for economic growth.

Importance of Economic Growth

Economic growth matters a lot, especially for countries like Nigeria. It helps reduce poverty, raise how people live, improve welfare services, and build up the strength of the country. Akadiri et al. (2018) explain that in developing countries, growth is very important. It helps people live better and brings down poverty. When the economy grows, more jobs come, incomes go up, and people can get more basic things like food, water, schools, and medicine. This kind of improvement helps citizens live a better life. Also, when a country has a growing economy, it can put more into education, hospitals, roads, and other key areas. These things build human skills and help society move forward. A strong economy also helps the country talk better with other countries and stand taller in global matters. But if the economy does not grow, or it slows down, then problems can get worse. More people can lose jobs, live in poverty, or feel angry. This can lead to fights, protests, or even make the politics unstable, which stops the country from growing well.

Also, when an economy grows, it brings in money that can be spent on things for everyone like schools, hospitals, and roads. Rodríguez-Pose & Garcilazo (2015) showed that the way a government works really affects how well these investments help. They said better government systems make investments work better. If the government is strong and fair, then public spending helps more and can grow the economy faster. They also showed that when the government is good at its job, it uses money spent on helping poor regions in a smarter way. This leads to better and

more even growth. This idea matters a lot for Nigeria. The country needs to make sure its government works well and is open, especially when handling public money. That way, economic growth can actually bring more benefits to more people.

Challenges in Achieving Sustainable Economic Growth

Nigeria has many big problems that make it hard to reach growth that is both lasting and fair. Gründler & Potrafke (2019) looked at how corruption affects growth in developing countries and found that it causes serious harm. Corruption takes away public funds from where they are needed most. It also scares off investors and weakens laws, which blocks real development. Another problem is bad infrastructure. If roads are poor or power goes off too much, or if communication systems do not work well, it becomes hard for people and companies to work properly. This lowers how much they can produce. Then, there is the problem of income gaps. When a small group has most of the money and chances, while others have very little, it makes growth narrow and unfair. It can even lead to anger and social problems. Also, when prices go up fast and the naira moves wildly, businesses do not know what to expect. That kind of confusion makes them afraid to invest. These problems need many actions together. Policymakers must not just fix one part but must look at the root causes and try to make the whole system better, to get a kind of growth that includes everyone and lasts.

Also, Ibrahim (2021) says corruption and large public debt both make economic growth harder. These two things reduce how much money is left for building new schools, hospitals, or roads. Instead, funds go into paying back loans or are lost through misuse. If the debt is too high, the government may need to pay a lot just to cover interest. This pushes up interest rates in the economy, so businesses find it too costly to borrow. That means fewer new companies, fewer jobs, and less growth. In Nigeria, this is a very serious matter. Fighting corruption and managing how

much the country owes are both very important if the country wants to grow in a way that is steady and strong. It shows that the country must be careful with spending and must make sure the rules are followed well. That is the way to build a strong economy over time.

2.1.3 Gross Domestic Product (GDP)

Gross Domestic Product (GDP) represents the aggregate monetary value of all final goods and services produced within a nation's borders during a defined time frame, typically one year (Cojocaru et al., 2016). It functions as a broad metric of a country's total economic activity. There are several methods for computing GDP, including the expenditure method which involves summing consumption, investment, government expenditure, and net exports, the income method, which totals all earnings generated in the production process, and the production method, which adds the value created at each production stage. Nominal gross domestic product uses present market numbers, while real gross domestic product fixes these numbers by cutting off the price rise effect, so it shows a cleaner sign of how the economy moves with time. Close watch of gross domestic product is needed to read the shape of a country's economy and to plan public rules that work. Rodriguez-Pose and Garcilazo (2015) found that the gain from investment can change when the control body is strong and fair, which means sound institutions help investment lift gross domestic product better. Their study notes that governance shifts how resources are shared and used across the system, shaping the final gross domestic product level. This shows that governance must stand as a key point when gross domestic product growth and its drivers are checked. But, testing how good governance is not easy, as it needs right sign picks and safe data records.

Gross Domestic Product (GDP) as a Measure of Economic Performance

Gross domestic product is often cited when people talk about economic conditions. It shows the total level of production and how this amount changes over time (d'Agostino et al., 2016). It is

used to watch economic shifts, to compare nations, and to help leaders take proper steps. Yet, gross domestic product has limits. It does not give a full picture of living standards. It leaves out things like how income is shared, how the environment is treated, or how people are doing socially. These are all important when talking about quality of life. Also, GDP does not always see what happens in the informal sector or things people do that are not sold in markets. This can make the real output of a country look smaller than it really is. Because of that, other ways to look at growth, like Human Development Index (HDI) and Genuine Progress Indicator (GPI), try to show the picture better. These look at more parts, like the social side, the environment, and how things are shared.

Then, there is the way institutions work. That also matters when it comes to how public spending helps GDP grow. Rodríguez-Pose & Garcilazo (2015) say that places with stronger government systems get more back when they invest. So, better governance means better results. It shows that if institutions are solid, open, and the public sector works well, it will help public investments make more impact. It tells decision-makers that just spending is not enough; they need to fix how the government works too. If not, even good plans might not work well. Also, if corruption is present, it can block the good effects that spending brings to the economy. This point is also noted by d'Agostino, Dunne, & Pieroni (2016).

Gross Domestic Product (GDP) Growth Rate:

The GDP growth rate shows how much real GDP goes up or down from one time to another, usually year to year. It gives a way to see how fast the economy is growing and is often used to check how strong or weak the economy is doing. The number depends on many things: how much is invested, how new technology helps, what rules the government makes, and also sudden changes from outside (Meyer & Shera, 2017). This growth rate connects with other big economic signs like

jobs, prices, and how much is being put into new projects. When GDP growth is high, usually more jobs are made, people earn more, and more projects are done. But if the growth gets too high too fast, it can push prices up too much, which is bad. Because of that, those who make policies always watch the growth rate. They use it to help guide how to keep things stable and help the economy grow without problems.

But how GDP growth links to other economic parts can be different depending on the country and situation. Cojocaru et al., (2016) looked at countries that moved from planned to market systems. They saw that when the financial system works well, the economy grows better. In those places, banks and markets that function right help push up investments, which then help GDP grow more. This shows that it's not one-size-fits-all. What works in one place might not work the same in another. So, when studying GDP and other economic factors, it's important to look at the country's own situation and how far along they are in development. How these parts mix together in each case will decide how the economy moves forward.

Gross Domestic Product (GDP) per Capita:

GDP per capita gets worked out by taking the whole GDP of a country and splitting it by how many people live there. This gives a kind of rough idea about what each person might get, on average. It's used often to check how life compares from one country to another. But even though it looks simple and useful, it does not tell the full picture. The number is only an average, and it doesn't show who is rich or who is poor. If some people have a lot and most have little, the number will still look okay, but the truth underneath is hidden (Meyer & Shera, 2017). Also, GDP per capita doesn't talk about other important things. It says nothing about health care, education quality, or how safe and clean the place is. These are all things that shape real life. So, even if GDP per capita gives a good starting point, it cannot say everything. Other ways, like the Human

Development Index (HDI), add in health, learning, and the environment to give a fuller and more useful view of how well people are really doing.

Then there's the matter of remittances and how they tie into GDP growth. Remittances are the money that people who work abroad send back to their families. Meyer & Shera (2017) built a data model to look into how these remittances affect a country's economy. What they found was that in many poorer countries, these kinds of money flows help the economy grow. This is mostly because the money brings in new capital from the outside. But how strong this help is depends on a few things. It matters how big the remittance flows are, how well the banks and money systems work to move and use that money, and how good the country is at turning that money into real growth through things like business and building. If those support systems are weak, the remittances might not help very much at all.

Gross Domestic Product (GDP) and Economic Development:

While GDP growth matters a lot for how an economy moves forward, it cannot do the whole job alone. GDP growth is one part, but economic development is a bigger thing. It means better living for people, more learning, better health, and stronger social systems. Ogundari & Awokuse (2018) looked at this in the case of Sub-Saharan Africa. They talked about how building up human capital is key for real growth. Their study tried to find out which part health or education does more to build human capital that leads to growth. What they found showed that health comes first. When people are healthy, they can learn better, and that makes education work even more. This kind of result hints that health may need to come before education when governments plan how to grow the economy. So, for countries that want to grow right, the focus must be on both health and education. Also, things like how wealth is shared and how strong the country's systems are matter a lot. These help turn growth into better lives for real people. That means that if the goal is true

economic development, just growing GDP is not enough. There must be strong plans for better schools, better hospitals, fairer systems, and better ways to make sure people get what they need to live well.

Also, the rules and plans made by the government can change how GDP grows and how development happens. d'Agostino et al., (2016) say that corruption makes a big difference here. They say that how a government spends money can help or hurt growth. If spending is fair and smart, it helps the economy. But if corruption takes hold, the money gets wasted. It doesn't go where it's needed. They show that when there is corruption, it messes with how resources are shared, stops investors from bringing in funds, and weakens the systems that should keep things working right. That's why it is important for leaders to fight corruption. Good leadership, honest systems, and clear spending plans can help businesses do better and help the economy grow the right way. If the right rules are in place and people follow them, the economy has a better chance of growing in a way that helps more people.

2.1.4 Inflation Rate (INFR)

Inflation tells how fast the prices for goods and services go higher, while at that same time, the strength of money for buying goes lower (Gründler & Potrafke, 2019). When prices go up, one single unit of currency cannot get the same amount of things like before. This shows that the real worth of the currency is going down. It becomes weaker for two reasons: to buy items and to help count the value of goods inside the economy. To check how fast these prices go up, experts use the Consumer Price Index, which people call CPI. This CPI keeps track of the price changes in a fixed group of normal goods and services over time. Inflation does not happen in only one way. There are different kinds. Demand-pull inflation starts when too many buyers want more than what the market has. Cost-push inflation starts when it costs more to make goods, so prices get pushed

higher. Knowing which kind is happening matters because the way to stop it is not the same. That is why correct and clear inflation data helps in making good plans and putting the right government steps in place.

Then Zhang et al., (2021) studied what public spending can do to inflation. They found that if the government starts spending more and the output does not also go higher, then prices can go up. The study, which focused on countries in the Belt and Road Initiative (BRI), found this problem happens more where green growth is the focus. They saw that if public spending rises too fast but goods do not increase as well, it brings pressure that pushes inflation higher. So, those who make the decisions must be careful in how they use government funds. The aim is to help the economy grow and not let prices rise too fast. Also, the way green growth policies are made and carried out can change how much inflation they bring. This shows that leaders must think clearly and again about how such policies shape what people want to buy and what the country can actually make at that same time.

Causes of Inflation

Inflation can begin for many reasons. One reason is when the amount of money grows faster than the goods people can buy. This makes too many people want things, but there are not enough things to go around. So, prices go up (Zhang et al., 2021). Another reason happens when something blocks the flow of goods like a flood or a war. If fewer goods are on the shelves, the price of what is left becomes higher. There is also the case when it costs more to make things. If workers ask for more pay, or if the price of raw materials climbs, the final goods will also cost more. Companies pass that cost to buyers. Sometimes, leaders try to help the economy by spending more or cutting taxes or lowering interest rates. But if they do too much of that, people spend more, and prices

climb again. It is important to look at the real cause of the price rise, so the right plan can be used to stop it.

Gründler & Potrafke (2019) studied something else. They looked at corruption and growth. They found that when there is too much corruption, the economy gets weaker. Investment goes down. Public goods do not get what they need. Instead, those in power take what should help everyone and use it for gain. This takes resources away from places like farming, schools, and roads. When that happens, not enough useful things are made. That can make prices rise too. So, if a country wants strong growth and steady prices, it must stop corruption. But not all corruption is the same. Some types hurt more than others. And in some countries, weak systems make it worse. That is why it matters to fix these systems and make rules work better. When rules are strong, growth can happen, and inflation can stay low.

Consequences of Inflation

Inflation can bring serious harm to an economy. When prices rise, people cannot buy as much as before with the same income. Vigo, et al., (2019) explain that this drop in buying power makes wages and savings lose real value. People then face a harder time meeting their basic needs. This weakens how they live. Businesses also get hit. When prices change too much, firms cannot plan well. They find it hard to set costs or decide on long-term investments. This stops growth and slows the economy. Some firms stop making real goods and instead chase short-term gains. That shift takes resources away from useful sectors. It makes the economy less strong. Poorer households feel it more, since most of their income goes into food, housing, and basic items. When prices rise, their burden grows. This also makes the gap between income levels worse. These effects show why keeping prices stable is a main job for economic policy.

High inflation that stays for a long time also causes people and firms to lose trust in the economy. d'Agostino et al., (2016) looked at how public spending and corruption go together. They found that where corruption is high, inflation becomes harder to stop. When officials misuse funds, the economy gets weaker. Instead of building schools or roads, resources go to private gain. That makes inflation worse. If corruption is left alone, public plans lose their effect. So, to stop the damage, governments must fix weak systems and control misuse. That can help prices stay steady. Still, the way corruption affects inflation is not always the same. It depends on how strong the country's rules are, and how well institutions work.

Managing Inflation

Under certain conditions, inflation may be slowed using different sets of actions, but these actions do not always bring the same result in all places. One known way is when the central bank lifts the rate of interest. This makes borrowing harder and spending softer. With less spending moving around, price increase can be pressed down (d'Agostino et al., 2016). Another method belongs to government control fiscal changes. When the public sector cuts back on what it spends, or when the burden of tax becomes heavier, the overall need for goods may drop. This drop in demand can quieten inflation, though sometimes at the cost of economic energy. On another side, there are ideas that try to fix the roots. These are supply-side attempts, made to help the system make more goods with the same or fewer costs. When supply finds a way to rise, pressure on prices may step back. But none of these steps walk the same in all places. Each country stands in its own place, with its own kind of inflation.

At the same time, public spending itself can wake inflation, especially if what is made in the economy stays still. Zhang, et al., (2021) showed how when the government pushes out more funds and the output remains flat, prices rise. That means spending, while meant to help, can sometimes

stir trouble. If too much is put into circulation without matching goods, the system stretches and prices climb. In this way, fiscal tools like raising tax or pulling back on spending turn into steering wheels. But how they turn depends on many moving parts: how large the budget is compared to the whole economy, how fast people shift their actions when rules change, and how much belief they hold that leaders will stay the course. Without that belief, or when decisions move like wind, the path out of inflation may not be found.

Inflation and Economic Growth

The tie between inflation and how an economy grows is not easy to explain in one way. Some think that when inflation stays at a soft, middle level, it may help push the economy forward. People may choose to buy more now before prices rise, and firms may make more goods because they expect future gains. This may bring more jobs and help national output rise. But when inflation grows too high or turns wild like hyperinflation it breaks many parts of the economy. It cuts the power of money. It eats into what people save. It makes the future blurry for workers and producers. Firms may then avoid taking risks or building long-term plans. When that happens, growth slows. That is why most economic guides say that it is better to keep inflation low and steady. Still, the best rate for one country may not fit another. It changes with the shape and needs of each economy.

Also, Vigo et al. (2019) looked at what inflation does to health systems. What they found shows concern. When inflation rises, it makes it harder for health budgets to cover basic care. Medicines, machines, and staff all cost more. But public health funds may not grow the same way. This weakens service, limits access, and hurts outcomes. In a country like Nigeria, where health service gaps already exist, this problem can become deep. Officials may have to pick between paying for this or for that often not being able to do both. Their work shows why it is not just growth that

inflation affects, but human well-being too. If leaders hold inflation in place, it becomes easier to keep hospitals running and patients cared for. Strong policy to manage prices does more than help the economy it helps protect life and health systems from pressure that keeps growing.

Inflation and Economic Growth:

The link between inflation and how an economy grows does not follow just one straight path. As shown by Samargandi et al. (2015), when inflation stays at a middle level not too low, not too high it may help push the economy forward. In such a setting, firms may expect prices to rise and so decide to produce more. This may lead to more workers being hired and more tools being bought, which supports higher growth. But when inflation becomes too high or turns into hyperinflation it begins to damage many parts of the economy. It weakens what money can buy. It cuts into savings and creates confusion about the future. Producers may not know what to expect, and this causes delays in building or investing. Also, the wrong use of resources becomes common, as people rush toward what feels safe instead of what is productive. This holds back growth. Because of these dangers, keeping inflation under control becomes a key part of building an economy that can grow in a stable way. But still, there is no one perfect inflation level that fits all. Each economy stands in its own condition, with its own structure. That is why each study of inflation and growth must look closely at the full context.

On the other side, the role of financial development in growth is also not always simple or clear. Samargandi et al., (2015) noted that the link may not always rise in a straight line. In some middle-income countries they studied, when the financial sector grew beyond a certain point, it did not always bring more growth. In fact, after a point, more finance did not help much or could even cause harm. This means the idea of “more finance, more growth” may not always work. It shows that policies should not be copied from one place to another without thought. Each economy has

its own depth, its own way of working. When creating policies to boost growth through finance, leaders must think about the stage the country is in. The way the financial tools are built and used can change what they bring. If designed without care, they may not do what is hoped.

2.1.5 Interest Rate (INTR)

Interest rate means how much it costs to borrow funds, shown as a percent of the main amount taken. Meyer & Shera (2017) talk about several types of interest rates. One type is the nominal interest rate. That is the one written clearly on the loan paper. But there is also the real interest rate, which shows what is left after taking away inflation. Another type is lending rate. This is the rate banks and other lenders ask from people who borrow. Interest rates help move capital around in an economy. They help decide who saves and who borrows. When interest rates go up, saving looks better because it brings more return. When interest rates fall, borrowing looks better because the cost is low. Central banks use these changes in rates to guide the economy. If growth is slow or prices are rising too fast, the central bank may change the interest rate to fix it. Knowing how these rates work and how they differ helps to understand how economic choices are made, and how the bigger economy behaves.

Also, not all interest rates act the same way on the economy. Cojocaru et al. (2016) looked at how interest rate moves affect investment in economies that are still shifting to full market systems. In those places, they found that rate changes can strongly shape how firms and people decide to invest. When interest is low, borrowing becomes easier, so more people take loans and start projects. But when rates rise, many stop or wait. Still, these effects do not happen the same everywhere. The impact depends on what the wider economy looks like, if it is steady or shaky, if the banks are trusted, if investors believe their funds are safe. All of that matters too when thinking about how strong an interest rate policy will be.

Determinants of Interest Rates

Many things shape how interest rates are set. Ibrahim (2021) looks at how choices made by the government like spending plans and tax changes can shift how much credit people want or can get. These changes affect how much borrowing happens, and that shifts interest rates. Also, what the central bank does matters a lot. If it sets a target for interest, that shapes short-term rates. People who lend money also think about inflation. If they expect prices to rise in the future, they ask for higher interest. This is to make up for the loss in value of what they get paid back. Credit markets play a role too. If many people want loans but few are saving, interest goes up. If there's lots of credit but not enough demand, it may fall. These parts policy, inflation, credit demand move together and decide the real level of rates. When rates change, the cost to borrow changes, and that affects what people do how they invest, what they buy, how much they save.

A stable economy helps keep interest rates from jumping too much. Ogundari & Awokuse (2018) say that when prices and exchange rates don't swing too fast, investors feel safer. This helps growth. But when inflation rises and the exchange rate jumps around, interest rates can become hard to control. People may stop investing because they can't guess what will happen next. For that reason, keeping the economy calm and steady helps make interest rates easier to manage and predict. That supports investment, savings, and long-term growth. In this way, interest rate management and economic stability go together.

Interest Rates and Investment

Interest rates can change how firms think about investing. Cojocaru et al. (2016) point out that if borrowing is cheap, more firms may decide to start new projects. A lower rate means it costs less to get capital. That makes investment look better. But if the rate is high, the cost to borrow is more. Firms may wait or stop investment plans. That slows growth. When firms see high interest, they

may worry the future is risky. This makes them more careful. So, when interest goes up, investment often goes down.

This is very true in places that are still building strong markets. In transition economies, the financial system is still growing. Cojocaru & colleagues say that when the financial side works better when banks and markets help move savings to real projects then growth becomes stronger. But this only works if the system is set up well. Without good banks or trusted rules, interest rates do not help much. So, just lowering rates is not enough. Countries also need to fix how savings get to businesses. Interest rate policy and financial reform need to work side by side.

Interest Rates and Savings

Interest rates also guide how people save. When rates are high, saving becomes more rewarding. People who save get more back. That makes it more likely that households will keep part of their income rather than spend it all. This builds up capital in the system. But when interest is low, saving feels less useful. People may choose to spend or put their money in other places that offer more return.

Akadiri et al. (2018) found that as human capital grows through education and skills so does income. With higher income, people may be able to save more. Their work looked at tourism and how it builds human capital. As workers in tourism gain knowledge and training, they become more productive. That leads to more income, and possibly, more savings. At the same time, if interest is too low, people may move funds into riskier places. What people save also depends on price expectations. If people think inflation will rise, they may not want to save in cash. Cultural habits and trust in the financial system also play a role.

Tourism can add to this. A growing tourism sector brings new income and jobs. That can boost household earnings and make saving more common. It also makes the economy more open to

outside spending. With stronger human capital and tourism growth, the economy builds more tools for long-term savings and investment.

Interest Rates and Economic Growth

The link between interest rates and growth is not always straight. When the rate is low, people may borrow more and spend more. This lifts demand. Businesses may also borrow more, build more, and hire more. That helps the economy grow. But if interest is too low for too long, problems may grow. Too much borrowing can lead to asset bubbles. This can raise inflation. Later, this creates instability.

Higher interest can stop inflation, but it may also slow down spending and investment. That can hold back growth. Ogundari & Awokuse (2018) show that keeping the economy stable especially through interest rates is key. The best rate is not always the lowest. It is the one that supports growth but keeps the risks under control.

In developing places, other things matter too. Meyer & Shera (2017) studied how remittances drive growth. They found that in such countries, outside funds from workers abroad can be a big help. This means that interest rates alone are not enough. Leaders also need to build better banks, support more access to finance, and help reduce how much people depend on just one income stream. If interest policy works with strong institutions, broader access, and good reforms, growth becomes more solid.

2.1.6 Government Budget Deficit (GBD)

When public offices spend more money than they bring in through local income during a set financial term, this gap is called a government budget deficit (Broadberry et al.). Instead of showing it only in money figures, the gap is often compared to gross domestic product to match it with the scale of the economy. Budget gaps show up in many ways, with the cyclical type coming

when the economy slows down, tax money falls, and social aid costs rise. This sort of gap may shrink when the economy starts to pick up. Another deeper form, called structural deficit, comes from steady faults in the budget plan itself. This can happen when regular spending grows beyond control or when the tax setup is weak and narrow. If leaders do not know which type of gap they face, the steps they take may not work or may come too late. This is why checking the size and type of the gap with careful tools is key for people who run public money.

A clearer look at budget gaps is offered by Onifade et al. (2020), who studied Nigeria's money plans. They show how weak budget moves, mostly when growth is pushed without balance, have caused repeated gaps. The results show the harm of letting spending go free or letting tax rules work badly. Such habits cut the power of a government to grow in the long run. Their work also points out that countries that get most income from oil or similar goods face big risks when world prices fall. This makes it important to rethink money plans, focusing not just on cutting but on widening how income comes from many sources. Without such steps, money gaps may stay even if leaders try quick fixes.

Causes of Budget Deficits

The start of a fiscal gap in a country's budget does not come from a single cause but from many forces acting together. One main cause is when trade and work slow down. Onifade et al. (2020) note that when people earn less and companies make fewer goods, the taxes that reach the state fall. At the same time, the need for public help grows, pushing the state to spend more. This clash of low income and high cost, even if short, brings strong strain. Another cause is when leaders use plans to push growth, often called expansionary fiscal moves. These can help when the economy

is weak, but if leaders fail to add new income sources or cut extra costs, the gap in the budget can grow beyond plan.

Lasting causes of budget gaps often come from deep faults in the income chain. Weak tax systems, poor checks on tax cheats, and a narrow tax base are part of this. These faults keep the state from raising steady funds, no matter how the wider economy moves. Old debt loads also add stress, as paying high interest on past loans takes away funds meant for new plans. This can create new gaps not from fresh actions but from old deals turning due.

Zhang et al. (2021) looked at fiscal strain linked to new growth aims, like green or eco-friendly projects. They found that while such steps give long-term gains, they can raise today's gaps if the money plan is weak. This shows that bold goals need smart funding paths. If money is spent on clean energy or green works without clear ways to raise matching funds, the budget weakens. It is vital for states to check not just near-term costs but also the long-term payback of such steps.

Consequences of Budget Deficits

When budget deficits persist across successive periods, the consequences often multiply in scope and intensity. Among the primary outcomes is the accumulation of sovereign debt. As highlighted by Rodríguez-Pose & Garcilazo (2015), continued borrowing necessitated by repeated shortfalls leads to a growing repayment obligation. This not only poses a future cost to the state but transfers a burden onto upcoming generations. Over time, this increasing debt stock may cause lenders to demand steeper interest rates, thereby raising the cost of borrowing both for the government and private actors who depend on the same financial markets.

As the state becomes a more prominent borrower, competition for loanable funds intensifies. This “crowding out” of private sector borrowers leads to a slowing of private capital formation. The outcome is that productive investment often the engine of innovation and employment shrinks,

curbing economic momentum. In more severe instances, an unmanaged or growing deficit may unsettle investor sentiment. As fiscal reliability becomes doubtful, foreign investors may begin to divest. Exchange rates may weaken in response, and the national economy may face sharp correctional pressures.

Beyond the numerical size of the deficit, the internal machinery of governance greatly influences whether the effects will be contained or compounded. Rodríguez-Pose & Garcilazo (2015) stress that when institutional frameworks are strong meaning public funds are allocated wisely, transparency is present, and oversight is active then public investment can still yield dividends, even in deficit conditions. In contrast, weak governance magnifies risks. Spending may be misdirected, cost overruns go unaddressed, and returns on investment diminish. In such settings, the deficit not only remains but grows more dangerous.

The trajectory of any budget reform depends not solely on intentions but on the method of execution. Institutional reforms are required, not as decorative policies, but as active levers to shift how budgets are shaped, approved, and tracked. These may include digital monitoring tools, independent audits, public reporting frameworks, and skill development in public finance offices. Only through this blend of fiscal prudence and governance restructuring can a state move beyond managing deficits to preventing them. Deficits, after all, do not only reflect economic gaps they reveal institutional habits. To correct them is not only a financial task but a systems one.

Managing Budget Deficits

Approaches to closing fiscal gaps in state budgets rarely stay tied to a single route but move through a blend of hard trade-offs. One route, called fiscal tightening, leans on cutting state spending, raising tax income, or using both if the setting calls for it (Zhang et al., 2021). Such actions can slowly drop the deficit size and slow down how fast public debt climbs. Another route

does not aim to cut costs but tries to push the economy to grow. The idea is simple: when the economy grows bigger, tax money grows as well. Building roads, improving schools, and shaping tax rules to draw in more business fall in this group. These are not instant answers but long plays that show results after some time.

There are also debt-based moves meant to ease fiscal strain. These can mean reworking how loans are paid back or swapping old costly loans for new ones with softer rates. Such steps do not clear the gap right away, but they change how the load feels by lowering interest or stretching payment years. Still, even these technical shifts are not always open to use. Politics and market moods can block them, as public anger or weak trust may sink such plans. It is plain that fixing fiscal gaps needs both smart design and political room to act.

Yet the path is not shaped by policy alone; politics bends it too. Onifade et al. (2020) show that money plans do not always follow pure economic sense. Leaders often place voter smiles or group pressure over strict budget repair. In Nigeria, for instance, those in power may hold back on tough steps like cutting subsidies or raising taxes when elections near, even if such moves would steady the budget. In this way, the drive to act and the urge to stay in office fight each other.

How far politics blocks fiscal repair depends on how the state is built and how strong its rules stand. When political rifts are wide or checks are weak, even strong budget plans can fade or stall. Fiscal design, then, needs not just cash tools but also a sense of the power or weakness of the system that carries it. A plan that looks good in books may fall apart where leaders give in to heavy pressure.

Budget Deficits and Economic Growth

The interplay between government fiscal shortfalls and a nation's economic advance is not one of those clean-cut cause-and-effect chains. The nature of their relationship flexes under different

weights, including timing, size, and financing style. When economic activity dips, a rise in deficit through public spending may act like a push, raising demand when private activity has stalled (Nyasha & Odhiambo, 2019). In such times, governments spend more than they collect not out of error, but by intent believing that extra demand from the state can lift jobs, business turnover, and national output. But this kind of deficit, seen by some as a useful jolt, does not always come without side effects.

Over longer periods, if gaps between revenue and spending persist, they begin to leave heavier marks. The piling up of debt often a shadow trailing behind the deficit becomes more than just a future obligation. It shapes choices today. Firms may find themselves competing with governments for credit, and as borrowing becomes costlier, private investment plans may be shelved or shrunk. If interest rates inch higher in response to government borrowing, it becomes harder for households and companies alike to take financial risks. The very tool used to lift the economy earlier may, when overused, weigh it down.

The research from Nyasha & Odhiambo (2019) touches another twist in this discussion. They note that not all government spending is equal in its effect. Some outlays can enhance growth such as those aimed at building roads, training workers, or improving technology. Others may pass through the economy without adding much to its productive base. Across the literature, findings diverge. Some authors show positive outcomes. Others reveal negative, or even neutral, patterns. The relationship, then, is not just about how much a government spends, but on what, and how well. Even the tools used to find these effects research models, data types, country samples can change the results. What works as a growth trigger in one economy may not work the same in another. This variation cautions policymakers not to lift policies straight from textbook conclusions or foreign case studies. Instead, each economy must be examined on its own ground its fiscal shape,

its institutions, and its social contract. Crafting public expenditure that supports growth demands more than copying global best practices; it requires reading local realities with honest eyes.

What makes this task more tangled is that the results of fiscal decisions often arrive later, long after the policies have been introduced. A program rolled out today may not show its full impact for years. By then, political terms may have ended, budgets may have changed, and new pressures may have emerged. That's why, in making budget decisions tied to growth, patience and strategic long-sight matter as much as the policies themselves.

2.2 Theoretical Review

2.2.1 Keynesian Theory of Economic Growth

The base idea of Keynesian growth theory, shaped by John Maynard Keynes in 1936, broke away from old economic habits by showing that active state action can guard against downturns and sharp slowdowns (Keynes, 1936). At its heart is the view that total demand, meaning the shared wish for goods and services in an economy, is the main spark for output and production. Keynes argued that decline in trade or jobs is not mostly caused by supply freeze but by weak spending and low private investment. To fill this gap, he called for public spending plans, along with lower taxes, to push demand upward, create work, and raise total output. This was very different from the older school, which trusted little in government to fix the economy. Keynesian ideas put the focus on keeping buying power steady so that the economy can rise to full work use and high production levels.

Still, the theory has drawn much debate. Some critics say it gives less weight to supply factors, like how new ideas or strong capital can grow output. Others warn that if leaders rely too much on demand boosts, prices may rise too fast and cause inflation. Milton Friedman and the monetarists argued that better control of money flow, not just spending, would keep the economy more steady.

Such views gave birth to New Keynesian ideas in the 1980s, which joined small-level factors like wage setting and firm pricing with big fiscal plans. This mix shows how Keynesian thought keeps changing to reflect both demand forces and deeper structural needs for growth.

But the use of these ideas in real policy is not smooth. The success of spending plans often depends not just on how much is spent but also on how well it is managed. Rodríguez-Pose and Garcilazo (2015) show that good results from state spending come when government systems are strong and clear. In places where such systems are weak, public funds can vanish without real growth. d'Agostino et al. (2016) show that even high public spending may fail if corruption or waste eats into it, leaving no real boost to the economy. This means that Keynesian steps lose their bite if they pass through weak systems. Thus, the amount of spending must always be tied to how carefully it is planned, watched, and used.

This study uses Keynesian thought to check how state spending in Nigeria links with output growth. Nigeria has faced many slowdowns and recessions, making the call for counter-cycle fiscal actions very real. The study asks if public spending truly helped growth or if weak systems blocked the effects. It also looks at price rise and lending costs so that spending is not wrongly seen as the only driver. This work is placed in a wide macro setting where many forces mix together.

Keynesian thinking may also work well for middle-income states, where leaders must mix fast growth with system change. Samargandi et al. (2015) note that in such states, strong financial systems help gather capital and grow industry. Using Keynesian-style spending here means not just pouring funds but using them to attract private finance and deepen systems. Yet such moves are not free from risk. Weak systems, price shocks, or uneven social services may spoil the plan unless it is well shaped to touch the right groups. There is also the risk that public funds may flow

to rich sectors while leaving others behind. Thus, when used for development aims, Keynesian tools need to be reshaped with fairness and good governance at the center.

2.2.2 Endogenous Growth Theory

The body of thought called endogenous growth theory rose in the 1980s with voices like Paul Romer and Robert Lucas Jr., who shifted away from the old view that progress comes from outside forces. Romer (1986) put forward that growth is not a gift of random invention but grows from choices and systems built inside the economy. In this view, lasting progress rests on how skills are formed, how learning spreads across groups, and how much drive is put into new ideas and tools. The inner shape of an economy—its push for research, schooling, and constant learning—acts as the true engine that lifts performance through time. This means countries do not share one fixed path but can grow in different ways, shaped by their own choices on schooling and creation of new knowledge.

Still, some readers doubt parts of this claim. They argue that the theory gives little weight to hard assets like machines, roads, and policy guides that also shape results. One key worry is the claim that research gives endless returns without slowing, which some call far too hopeful. To address this, new branches of the theory have added ideas about the role of the state, spillover effects, and how strong systems guide the results of growth. These changes aim to bring the theory closer to how economies work in practice. Yet, tests in real places show mixed pictures—some data support the model, while other data do not. This suggests the theory's use may rest on local settings more than on its neat logic.

Ogundari and Awokuse (2018) in their work on Sub-Saharan Africa showed that money put into learning and health directly improves output. Their results match the idea that knowledge and human power act as core tools for growth. Samargandi et al. (2015) also found that well-run

finance systems can boost both learning and the birth of new ideas. These points show that when credit flows are healthy and guided by good policy, human capital and new tools work better together. This calls for linked plans that join learning, finance, and fresh ideas into one growth plan.

In this study, endogenous growth theory is the lens used to look at how government spending shapes long-term growth in Nigeria. Focus is placed on public funds for schools, clinics, and roads, as these are the very roots—skills, access, and technology—that the theory sees as vital. Here, spending is treated as a seed meant to grow into future output. The study checks if such inputs truly raise growth or if other forces block their effects. Inflation and interest costs are added to the mix to see how much of the result belongs to public spending alone.

The theory also suits the case of developing nations where state spending often guides the growth path more strongly. Zhang et al. (2021) found that green spending on solar or eco projects can serve both the planet and the economy at once. This way of seeing public spending as both a change driver and a growth driver shows that with wise plans, consumption can become transformation. Yet, weak systems, poor skills, and unclear returns may dull these efforts. For this model to work, states must track results, adjust when needed, and learn from both economic and environmental outcomes.

2.3 Empirical Reviews

Onifade et al. (2020) carried out a study to check how different forms of government spending, capital, recurrent, and debt-driven, affect Nigeria's economic growth. The work placed focus on joining different views in past studies, with a fresh look at how spending-led growth connects with debt-backed projects and how private sector activity may be crowded out. The study, covering Nigeria from 1981 to 2017, built its base on Keynesian ideas mixed with the crowding-out theory.

Using a numbers-based approach, the research applied the Autoregressive Distributed Lag (ARDL) model by Pesaran, testing real GDP as the key outcome while recurrent spending, capital outlays, debt-to-GDP share, private spending levels, and total domestic investment were taken as the main input factors. Data sourcing was triangulated from the Central Bank of Nigeria (CBN) Statistical Bulletin, World Development Indicators (2018), and IMF (2019). Analytical procedures spanned unit root evaluation, ARDL bounds co-integration testing, Granger causality, and diagnostic screenings covering heteroscedasticity, serial correlation, and instability of structure. Findings affirmed a cointegrated connection over the long haul between fiscal actions and GDP, where recurrent expenditure exerted downward drag, capital spending failed to demonstrate statistically robust growth promotion, and public debt expansion revealed contractionary tendencies. The authors inferred that steady economic momentum required fiscal prudence, shunning overreliance on recurrent commitments or deficit-driven stimuli. Recommendations involved rationing recurrent bills, enhancing fiscal transparency in capital undertakings, and tethering borrowed funds to productivity-enhancing applications. In another study, Anzaku (2019) interrogated the implications of public fiscal disbursements particularly capital and recurrent divisions on GDP expansion within Nigeria for the interval 1981 to 2015. This investigation, predicated on Keynesian thought, employed an ex post facto quantitative design wherein GDP served as the response variable against government capital and recurrent outlays. Data were retrieved from the 2015 CBN Statistical Bulletin. Econometric instruments included Augmented Dickey-Fuller (ADF) tests, Johansen co-integration diagnostics, Granger causality checks, and the Ordinary Least Squares (OLS) regression method. Resultantly, capital spending was found to exert a positive, statistically meaningful effect on GDP, whereas recurrent spending, although statistically significant, registered minimal intensity in explaining GDP variations. The study's

summative stance held that fiscal outflows both capital and recurrent bear explanatory power for economic expansion but necessitate diligent oversight to enhance output efficacy and avoid resource misuse. Lastly, Ezeanyagu (2013) conducted a time-series analysis spanning 1981 to 2010 to decipher the interaction between Nigerian public expenditure and economic growth, with Keynesianism and Wagner's Law forming the theoretical backdrop. Adopting OLS regression for empirical inspection, the researcher modelled GDP against government expenditure, monetary supply, inflation, and lagged GDP. Sourced data originated from CBN and the National Bureau of Statistics. Analytical routines incorporated t- and F-tests, Durbin-Watson autocorrelation checks, Jarque-Bera normality assessments, and White's heteroscedasticity test. The central discovery revealed positive associations between GDP and variables such as inflation, M2, and lagged output, with government expenditure and money supply demonstrating significant sway within the model. A high R^2 value of 0.96 showed that the model had strong power to explain the observed patterns. In conclusion, the study viewed fiscal expansion as a useful tool for Nigeria's growth, as long as it is backed by solid spending on infrastructure and careful monetary steps that keep money supply steady. Duruibe et al. (2020) explored how government spending links to Nigeria's economic growth by breaking down expenses across key sectors for 1986 to 2016. Though no single theory was stated, the study's setup reflected ideas from Keynesian thought mixed with possible crowding-out effects. Their work used an empirical path with the Vector Error Correction Model (VECM), where real GDP was the main outcome variable. Public spending on administration, economic areas like transport and farming, social needs such as schools and health, and transfer payments were the predictors. Data came mainly from the 2017 CBN Statistical Bulletin and World Bank reports. Prior to estimation, the study deployed time-series screening tools including unit root evaluation, followed by cointegration tests to assess long-term equilibrium

tendencies. VECM estimation ensued, with a battery of post-estimation checks: heteroscedasticity verification, autocorrelation screening, normality tests, and Wald constraints testing for parameter significance. The conclusions pointed toward a noticeable growth-enhancing tendency when expenditure was directed at economic and communal sectors, while funds spent on administrative operations were not only statistically counterproductive but also consistently harmful to output growth. Transfer payments, while aligned positively, lacked the statistical force to claim significance. The authors interpreted these results as evidence that growth dividends are more attainable when public finance avoids excessive administrative dilution and prioritizes productivity-linked domains. A different analytical inquiry by Ugwu, et al., (2021) turned the attention toward macroeconomic imbalances, specifically the interplay between government consumption and Nigeria's current account position, over a 1980–2019 window. Drawing on Keynesian propositions alongside the twin deficit theory, the study's quantitative formulation incorporated the ARDL cointegration procedure. Their target variable was the current account balance, with key drivers being logged government consumption expenditure ($\text{LOG}(\text{GCON})$), GDP growth rate (GDPGR), interest rate (INTR), and government fiscal deficit (DEFICIT). The data trail, though not exhaustively itemized, was said to include standard macroeconomic databases. Analytical routines commenced with unit root diagnostics (ADF) to ascertain data stationarity, followed by the ARDL bounds approach for exploring equilibrium relationships. The estimation advanced through short-run and long-run decompositions, alongside residual-based evaluations of model integrity including CUSUM and CUSUMSQ tests for stability, and checks for serial dependence and distributional anomalies. Their findings confirmed that higher government consumption tends to depress the current account in the long term, while GDP growth had a marginally beneficial role. The budget deficit was shown to reinforce the current account

imbalance, validating the twin deficit linkage. The authors inferred that fiscal looseness, particularly driven by unproductive consumption, transmits strain to the external sector, and advised moderation in government borrowing. Lastly, Nwankwo et al. (2022) revisited the perennial mismatch between Nigeria's federal spending volume and its modest economic yield from 1986 to 2020. Although no doctrinal frame was overtly declared, the analytic leanings suggested a merger of Keynesian and endogenous growth paradigms. Their methodology, embedded in the ARDL framework, treated four dependent constructs real GDP, gross fixed capital formation, savings, and manufacturing capacity utilization in alternating models. The two expenditure classes under scrutiny were recurrent (GREXP) and capital (GCEXP), while the explanatory tools included descriptive statistics, ADF unit root testing, ARDL bounds cointegration assessment, parameter estimation for long- and short-run impact, model diagnostics (serial correlation, Ramsey RESET, and variance checks), and Granger causality mapping. Findings outlined recurrent expenditure as a consistent drag on all macro-indicators studied, while capital expenditure showed a mixed impact: it bolstered capital formation and manufacturing utilization but surprisingly bore a dampening effect on real GDP and savings. The authors inferred that Nigeria's recurrent outlays, while expanding, do not translate to economic efficiency or productivity, and advised a recalibration of fiscal priorities specifically, shifting toward productive capital allocations, tightening fund oversight, and amplifying budgetary discipline to align spending with developmental objectives.

Nyasha & Odhiambo (2019) embarked on a scholarly exercise involving a methodical mapping of prior international research concerning how public expenditure interacts with economic growth trajectories, covering literature developed from the 1980s until recent years. The intention was to reinterpret conflicting evidence spread across decades and geographies to provide a synthesized

understanding. Theoretical alignments observed throughout the review drew from a medley of macroeconomic paradigms spanning Classical, Keynesian, Neoclassical, and public choice perspectives all of which have historically informed the conceptualisation of state expenditure as a lever for macroeconomic outcomes. The authors applied a content-analysis methodology, classifying reviewed empirical studies by the directional nature of their findings: whether growth effects of public spending leaned positive, negative, or neutral. Though the review abstained from deploying fresh datasets, it functioned as a consolidation mechanism for various peer-reviewed studies. The dependent construct under focus was economic growth, while the central explanatory variable remained public expenditure. The inquiry's core output suggested a divergence in outcomes, with findings spread unevenly across the impact spectrum. Nevertheless, the weight of accumulated results tended slightly toward the view that public expenditure tends to exhibit a positive growth association more often than not. Consequently, the study suggested further precision is needed in future investigations, especially through expenditure disaggregation between social and economic typologies.

Elaiwu & Khikando (2024) narrowed the empirical lens to the Nigerian context, spanning from 2005 to 2022. The motivating concern revolved around the paradoxical coexistence of persistent poverty rankings and escalating government disbursements. Grounded in Keynesian ideology, their research explored whether capital and recurrent expenditure could significantly alter GDP per capita in the Nigerian setting. Utilizing a post-facto quantitative layout, they employed multiple linear regression analysis through SPSS 20.0. GDP per capita was the outcome variable; capital and recurrent outlays were used as predictors. The data inputs were drawn from the Central Bank of Nigeria's 2016 bulletin and the World Development Indicator from 2017. Descriptive statistics and correlation matrices preceded the regression estimations. The research reported that both

capital and recurrent components of expenditure yielded statistically meaningful, positive associations with GDP per capita. The authors inferred that growth-supportive outcomes were best obtained through intensified capital spending within productive arenas and a sustained recurrent allocation for operational continuity in vital sectors. Recommendations pointed toward enhanced capital budget prioritisation, diligent fund deployment, and reform-driven expansion of recurrent expenditure efficiency.

Chandana et al. (2020) extended the discourse on Nigeria's public finance architecture, placing emphasis on distinguishing the impact trajectories of capital versus recurrent expenditure from 1970 to 2019. The inquiry was housed within the theoretical frame of endogenous growth theory, which underscores the internal origins of long-term output dynamics. Adopting a strictly quantitative methodology, they relied on the Autoregressive Distributed Lag (ARDL) framework. Here, economic growth represented the explained variable, while capital and recurrent outflows served as independent constructs. To control for policy shocks and historical disruptions, the Bai-Perron structural break test was included. The research engaged ADF and Phillips-Perron unit root assessments before proceeding to bounds cointegration analysis and ARDL estimation. Data sources included the CBN bulletin and WDI (2020). Core diagnostics validated model stability and residual integrity. Key insights revealed that capital spending bore statistically significant and positive effects across both temporal horizons, while recurrent expenditure did not demonstrate appreciable growth influence. Based on these results, the authors called for amplified capital outlays in citizen-welfare-enhancing projects and a strategic redirection of recurrent funds toward development-sensitive functions.

Enwefah and Maku (2024) took a slightly altered path by interrogating private consumption determinants within Nigeria from 1980 to 2022. The central hypothesis tested whether state

expenditure, along with selected macroeconomic aggregates, had explanatory value for private household consumption. Their framework synthesized insights from relative consumption theory, the permanent income hypothesis, and Keynesian economics. Employing ARDL methodology, the dependent factor was private consumption expenditure, while government expenditure, inflation, exchange rate, GDP growth rate, and gross capital formation ratio were applied as explanatory inputs. Data were harvested from CBN and WDI sources. After confirming stationarity and cointegration properties, they advanced to parameter estimation. Diagnostic screenings were also executed. The major empirical insight disclosed that among the variables tested, only lagged private consumption exerted statistically significant influence on current consumption levels, reinforcing relative consumption theory. Public expenditure and macro-indicators, while theoretically pertinent, did not achieve significance thresholds in this specific context. Their interpretation suggested a behavioural lag mechanism in Nigerian household consumption patterns. The authors urged policymakers to revisit assumptions around macro-levers and proposed broader empirical work incorporating structural and behavioural dimensions.

2.4 Summary of Literature and Gap

The cumulative picture emerging from existing literature reveals uneven empirical verdicts on the public spending-growth nexus. Some strands, including the work of Rodriguez-Pose and Garcilazo (2015), underline how institutional strength can condition the efficacy of fiscal interventions. Conversely, findings like those of d'Agostino, Dunne, and Pieroni (2016) suggest that corruption interlaced with expenditure undermines growth channels. Empirical analyses specific to Nigeria such as Onifade et al. (2020) have highlighted the varying productivity of different fiscal components, showing that while capital spending holds promise, recurrent allocations and debt-fuelled expansions may be growth-retarding. In similar tone, Chandana et al. (2020) affirmed the

superior role of capital investment in output enhancement. Nonetheless, many of these works exhibit partial blindness toward contextual complexities such as policy shifts, structural disruptions, or the peculiarities of data reliability in developing economies, as flagged by Ibrahim (2021). These overlooked variables form the basis for the present study, which seeks to conduct a refined assessment of government consumption expenditure's impact on Nigeria's growth, with strict attention to temporal boundaries, contextual markers, and methodological rigour.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

This work makes use of an ex post facto research pattern. This choice fits the aim of checking how public consumption spending links with economic growth since it studies data that already exist from past years. It is not possible to change or test government spending in a lab form, so this pattern allows a look back at how both factors moved together. Such a setup is often used in macroeconomic studies where experiments are not practical, as it deals with real records and past economic outcomes.

3.2 Area of Study

The focus of this study is Nigeria, a West African country with large oil wealth and a wide population. As one of the leading economies in Africa, the performance of Nigeria holds weight for both the region and the continent. The study looks closely at how government consumption spending affects total growth in the nation's economy. This choice is key because public spending shapes major macroeconomic results in Nigeria. With its heavy leaning on oil income, studying the role of consumption spending gives useful clues for planners and stakeholders.

3.3 Sources of Data

The study draws on secondary records from trusted sources. The main source is the Central Bank of Nigeria (CBN) Statistical Bulletin, which lists key macroeconomic data such as government spending, GDP growth rate, inflation, interest, and deficit levels. The World Bank's World Development Indicators (WDI) is used as a second source to support and compare figures with global standards. Using such strong data points improves the trustworthiness of the study and

ensures a firm analysis of how government consumption spending links with Nigeria's growth path.

3.4 Tool for Data Collection

Data extraction sheets were built to collect and arrange the needed figures from the secondary sources. These sheets were designed to pick up data on government consumption spending (GCE), GDP growth rate (GDPGR), inflation rate (INFR), interest rate (INTR), and budget deficit (GBD) from 2013 to 2023. The sheets also carried fields for listing the source, describing each variable, noting its unit, and marking the record date. Extra fields were added to track any shifts in how the data were computed during the period. Accuracy was improved by checking the values against more than one official source where such cross-checks were possible.

3.5 Method of Data Collection

The method followed a careful three-step process. First, all sources with the needed indicators were located. Second, the exact data points were pulled from the CBN Bulletin and WDI records. Third, the pulled data were checked and matched with figures from other sources to confirm they were correct. The databases were accessed online through official links and approved portals. If any mismatch arose, CBN data were taken as the main reference while other sources acted as support. All the figures were saved in a uniform spreadsheet layout for easy analysis.

3.6 Population of the Study

The study population covers all yearly economic records of Nigeria from 1960 to 2023. This makes a total of 64 yearly data points, each containing measures of GCE, GDPGR, INFR, INTR, and GBD. The population covers all stages of Nigeria's fiscal history including policy changes, growth cycles, structural reforms, democratic phases, and global shocks that shaped the economy. Each year is treated as one unit of study.

3.7 Sample and Sampling Technique

A purposive sampling style was chosen to focus on data from 2013 to 2023. This decade marks a key phase in Nigeria's economy with major reforms, policy changes, and fiscal challenges, making it apt for the study. The sample carries yearly data for GCE, GDPGR, INFR, INTR, and GBD. This targeted method allows a close study of a fresh and useful period for today's policy talk. The sample is large enough since it covers ten full years, giving enough points for ARDL analysis while keeping the study current.

3.8 Model Specification

The study uses a refined econometric model shaped from Ugwu et al. (2021) to test how government consumption spending affects Nigeria's GDP growth rate. Control variables are added to factor in other elements that may affect growth. The model is given as:

$$GDPGR = \beta_0 + \beta_1 GCE + \beta_2 INFR + \beta_3 INTR + \beta_4 GBD + \varepsilon$$

Where:

GDPGR = GDP growth rate

GCE = Government consumption expenditure

INFR = Inflation rate

INTR = Interest rate

GBD = Government budget deficit

β_0 = Intercept

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients to be estimated

ε = Error term

This model helps to check how GCE connects with GDPGR while also noting the roles played by inflation, lending rates, and budget gaps. With these control variables added, the model gains strength and offers a deeper picture of how GCE influences economic growth.

3.9 Description of Variables

GDP Growth Rate (GDPGR): This is the annual rate of change in real Gross Domestic Product (GDP), showing the pace at which Nigeria's economy rises or falls.

Government Consumption Expenditure (GCE): This is the total government outlay on goods and services for direct use, excluding capital works, stated as a part of GDP.

Inflation Rate (INFR): This is the annual rate of increase in the Consumer Price Index (CPI), showing how fast the overall prices of goods and services move up in Nigeria.

Interest Rate (INTR): This is the mean rate charged by commercial banks on loans, showing the borrowing cost for both firms and individuals.

Government Budget Deficit (GBD): This is the shortfall between government total outflows and total income within a year, shown as a part of GDP, indicating the amount the state borrows.

3.10 A Priori Expectations

Variable	Coefficient	Expected Sign
GCE	β_1	+ or -
INFR	β_2	-
INTR	β_3	-
GBD	β_4	-

This table presents the prior expectations regarding how the independent and control variables may link with the dependent variable (GDPGR). GCE could show either a positive or a negative link with GDPGR, reflecting different schools of thought in economics. INFR, INTR, and GBD are

likely to reduce GDPGR, which aligns with common macroeconomic reasoning. These expectations will later be compared with the study's actual findings to test the stated hypotheses.

3.11 Data Analysis Techniques

The study combines basic descriptive tools and econometric models to study the data and provide answers to the research aims.

Descriptive Statistics: Basic descriptive measures like mean, median, standard deviation, and range will be used to summarise the nature of the variables. These measures will give a first look at the data and show any strange points or shifts.

Unit Root Tests: Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests will be applied to check if the time series data are stable or not. These tests are key to know the order of integration and to make sure later econometric results are sound. Testing for stability helps avoid false regression outcomes.

Autoregressive Distributed Lag (ARDL) Approach: The ARDL bounds method by Pesaran et al. (2001) will be used to explore both long-run and short-run links between GCE and other macroeconomic indicators. ARDL is chosen because it works well with data that mix orders of integration ($I(0)$ and $I(1)$). It allows for both the long-run balance and short-run movements to be estimated.

Error Correction Model (ECM): If the data show cointegration, an ECM will be used to study how the variables adjust in the short term. The ECM uses an error correction term to show how fast the variables return to their long-run balance after a short-run change. This highlights how quick corrections happen when deviations occur.

Diagnostic Tests: Tests such as Breusch-Godfrey for serial correlation, Breusch-Pagan for heteroscedasticity, and CUSUM with CUSUMSQ for model stability will be carried out. These

checks confirm the soundness of the model and point out any faults that may affect the results. Clearing these checks strengthens the reliability of the findings.

3.12 Limitations of the Study

This study notes some key limits. First, any research using secondary macroeconomic data faces the risk of gaps or errors. While official data sources are often trusted, they may not be fully accurate. Second, the focus is on the years 2013–2023, so events outside this span, like global crises or sudden policy changes, are not fully covered but may still affect the trends. Third, since this work studies only Nigeria, the results may not apply directly to countries with different systems, fiscal setups, or policy styles. Fourth, the study mostly uses quantitative tools, which give strong numeric results but do not capture the finer human or policy factors driving spending and growth. Later studies can explore these hidden factors through case-based or qualitative methods for a broader view.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION OF RESULTS, AND DISCUSSION OF FINDINGS

4.1.1 Data presentation

Table 4.1: Annual Trends in Government Budget Deficit (GBD), Government Consumption Expenditure (GCE), Inflation Rate (INFR), Interest Rate (INTR), and GDP Growth Rate (GDPGR) from 1999 to 2023

YEARS	Government Budget Deficit (GBD)	Government Consumption Expenditure (GCE)	Inflation Rate (INFR)	Interest Rate (INTR)	GDP Growth Rate (GDPGR)
1999	34.1	947.7	6.6184	20.29	-
2000	185.7	701.1	6.9329	21.27	16.94
2001	221	1,018.00	18.8736	23.44	6.35
2002	301	1,018.20	12.8768	24.77	29.21
2003	202	1,226.00	14.0318	20.71	10.19
2004	172.6	1,504.20	14.998	19.19	32.48
2005	314	1,919.70	17.8635	17.95	26.6
2006	357	2,038.00	8.2252	16.89	34.6
2007	500	2,450.90	5.3881	16.94	17.68
2008	926.9	3,240.80	11.5811	15.14	22
2009	1349.35	3,453.00	12.5549	18.99	-13.1
2010	991.3	4,194.60	13.7202	17.59	24.4
2011	209	4,712.10	10.84	16.02	12.94
2012	1146.19	4,605.30	12.2178	16.79	11.94
2013	960.77	5,185.30	8.4753	16.72	12.1
2014	1,155.33	4,587.40	8.0525	16.55	10.39

YEARS	Government Budget Deficit (GBD)	Government Consumption Expenditure (GCE)	Inflation Rate (INFR)	Interest Rate (INTR)	GDP Growth Rate (GDPGR)
2015	1550	4,988.90	9.0094	16.85	-14.13
2016	2676	5,858.60	15.6753	16.87	-17.93
2017	3090	6,456.70	16.5226	17.58	-7.14
2018	3620	7,813.70	12.0947	16.9	12.24
2019	4910	9,714.60	11.3968	15.38	12.51
2020	4660	10,213.70	13.248	13.64	-8.92
2021	5600	12,164.10	16.9528	11.43	2
2022	5730	13,254.60	18.85	12.33	7.21
2023	6110	14,782.30	24.5	14.01	2.99

Source: CBN Statistical Bulletins, 2022, and World Bank Database, 2024.

4.1.1 Descriptive Statistics

Table 4.2: Descriptive statistics result for time series data on Government Budget Deficit (GBD), Government Consumption Expenditure (GCE), Inflation Rate (INFR), Interest Rate (INTR), and GDP Growth Rate (GDPGR) from 1999 to 2023.

Variable	GDPGR	GCE	INFR	INTR	GBD
Mean	10.15	5295.91	13.12	17.25	1955.76
Median	12.02	4596.35	12.72	16.88	1068.75
Maximum	34.60	14782.30	24.50	24.77	6110.00
Minimum	-17.93	701.10	5.39	11.43	172.60
Std. Dev.	14.63	4071.30	4.44	3.12	2040.50
Skewness	-0.28	0.93	0.48	0.54	0.93
Kurtosis	2.34	2.85	3.13	3.44	2.34
Jarque-Bera	0.74	3.50	0.92	1.36	3.91
Probability	0.69	0.17	0.63	0.51	0.14

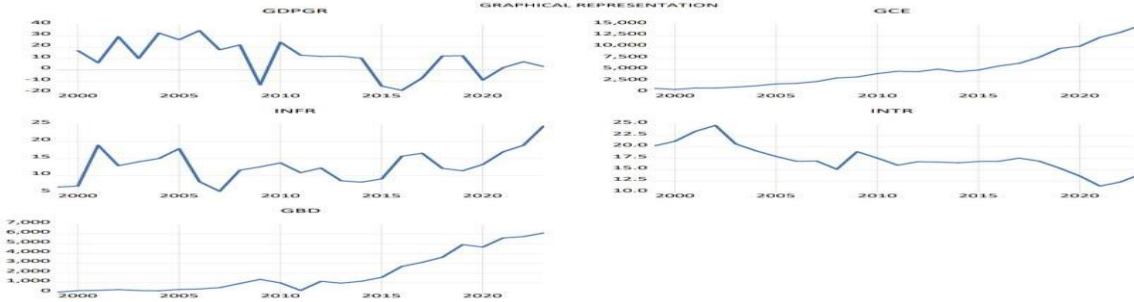
Source: Eview output, 2024

The descriptive numbers give a close look at the main shape of the variables. For GDP Growth Rate (GDPGR), the mean value stands at 10.15% (SD = 14.63%), which tells that the growth pattern is moderate yet shows wide changes from year to year. The skewness value being negative (-0.28) gives a clue of a small lean to the left, while the kurtosis value (2.34) tells of a flatter form that is platykurtic in nature. The Jarque-Bera test result (JB = 0.74, $p = .69$) makes it clear that the spread of this data can be seen as close to normal shape. Government Consumption Expenditure (GCE) holds an average of ₦5,295.91 billion (SD = ₦4,071.30 billion), and it shows a right pull with positive skewness (0.93), while its kurtosis (2.85) is near the normal point, which means the data rises slightly more on one side. The Jarque-Bera output (JB = 3.50, $p = .17$) gives support that this variable is also close to normal form.

For Inflation Rate (INFR), the mean score is 13.12% (SD = 4.44%), with a positive skew (0.48), while the kurtosis value (3.13) rests close to normal levels. The Jarque-Bera check (JB = 0.92, $p = .63$) proves that its pattern does not move far from normality. Interest Rate (INTR) shows an average of 17.25% (SD = 3.12%), with skewness on the positive side (0.54), while its kurtosis value (3.44) points to a leptokurtic shape, which means the tails are thicker than normal. The Jarque-Bera figure (JB = 1.36, $p = .51$) suggests that it still follows a normal layout. Lastly, Government Budget Deficit (GBD) stands at a mean of ₦1,955.76 billion (SD = ₦2,040.50 billion). It shows a clear right skew (0.93) and a flat, low kurtosis level (2.34). The Jarque-Bera test (JB = 3.91, $p = .14$) further suggests that the data is fairly normal in its spread.

4.1.2 Graphical Analyses

Figure 4.1: Graphical analysis results time series data on GDP Growth Rate (GDPGR), Government Consumption Expenditure (GCE), Inflation Rate (INFR), Interest Rate (INTR), and Government Budget Deficit (GBD) from 1999 to 2023.



Source: Eview output, 2024

GDP Growth Rate (GDPGR) moves with sharp swings and shows wide changes during the study years. Between 2000 and 2006, GDPGR runs in a cycle, rising to 34.6% in 2006 and 32.5% in 2004 ($N = 24$, $M = 10.15\%$, $SD = 14.63\%$). A heavy fall appears in 2009 when growth drops to -13.1%, linked to the global crisis. The economy rises again in 2010 with 24.4% growth, but from 2015 to 2017 another big fall hits, dropping to -17.93% in 2016, which is the worst recession in many years. This fall connects with low oil prices and currency troubles. After 2017, recovery shows up but not stable, with another dip to -8.92% in 2020 during the COVID-19 shock, before climbing to 7.21% in 2022 and settling at 2.99% in 2023.

Government Consumption Expenditure (GCE) climbs upward without pause across the years. It was ₦947.7 billion in 1999 and dropped slightly to ₦701.1 billion in 2000 ($N = 24$, $M = ₦5,295.91$ billion, $SD = ₦4,071.30$ billion). After 2000, it grew steadily, passing ₦2 trillion in 2006 and speeding up after 2010. The fastest jump is between 2017 and 2023 when GCE rises from ₦6,456.7 billion to ₦14,782.3 billion. This growth reflects more public projects, bigger infrastructure plans, and wider social programs. Yet, this sharp climb also raises doubts about fiscal strength, especially with the widening budget gap.

Inflation Rate (INFR) shows frequent changes across the period. In 2001, it jumps to 18.87% from 6.93% in 2000 ($N = 24$, $M = 13.12\%$, $SD = 4.44\%$). It then drops to 5.39% in 2007, the lowest point, but starts climbing again with ups and downs. From 2015 to 2017, inflation rises quickly,

reaching 16.52% in 2017. After a small drop in 2018 and 2019, it rises again from 2020, hitting 24.5% in 2023, which is the highest value. This sharp rise is tied to global price hikes, COVID-19 impacts, and local factors like subsidy removal and currency fall.

Interest Rate (INTR) moves mainly downward but with some jumps. From 24.77% in 2002, it falls to 15.14% by 2008 (N = 24, M = 17.25%, SD = 3.12%). In 2009, it rises briefly to 18.99%, linked to the global financial crisis. From 2010 to 2020, it stays mostly stable, ranging between 15% and 17%. A clear drop happens in 2020-2021, reaching 11.43% in 2021 due to post-pandemic monetary actions. A small rise follows in 2022-2023, climbing to 14.01% at the end, showing tighter policy to check inflation.

Government Budget Deficit (GBD) grows sharply over time. It starts at ₦34.1 billion in 1999 and stays low until 2008 when it begins to climb (N = 24, M = ₦1,955.76 billion, SD = ₦2,040.50 billion). Between 2015 and 2019, the deficit triples from ₦1,550 billion to ₦4,910 billion. A small fall occurs in 2020 to ₦4,660 billion, likely due to limited spending during early pandemic phases, but it climbs again to ₦6,110 billion by 2023. This sharp rise shows deep issues for fiscal balance and debt control, especially with unstable GDP growth. The widening deficit points to structural weaknesses in Nigeria’s fiscal path, limiting room for economic policy actions.

4.2.2: Correlation Matrix

Table 4.3: Pearson Correlation Coefficients

Variables	GDPGR	GCE	INFR	INTR	GBD
GDPGR	1.000000	-0.432242	-0.207382	0.275057	-0.459990
GCE	-0.432242	1.000000	0.486564	-0.798706	0.967387
INFR	-0.207382	0.486564	1.000000	-0.149354	0.509292
INTR	0.275057	-0.798706	-0.149354	1.000000	-0.714046
GBD	-0.459990	0.967387	0.509292	-0.714046	1.000000

Source: Eview output, 2025

The Pearson correlation results show unique patterns across the variables. GDP growth rate (GDPGR) has a moderate negative relation with government consumption expenditure ($r = -.43$) and government budget deficit ($r = -.46$), suggesting that heavier public spending and bigger fiscal gaps are linked with weaker economic growth in Nigeria. GDPGR has a weak negative relation with inflation rate ($r = -.21$) and a slight positive relation with interest rate ($r = .28$), meaning that higher interest rates may give a small push to growth, while inflation puts mild pressure on it. Government consumption expenditure (GCE) holds a very strong positive relation with government budget deficit ($r = .97$), which is expected since increased public outlays often result in larger fiscal gaps. GCE shows a moderate positive relation with inflation rate ($r = .49$) and a strong negative relation with interest rate ($r = -.80$), showing that fiscal expansion can add to price growth while linking with lower interest charges. Inflation rate (INFR) shows a moderate positive relation with budget deficit ($r = .51$) and a weak negative relation with interest rate ($r = -.15$). Interest rate (INTR) has a strong negative relation with budget deficit ($r = -.71$). While some correlations appear strong, especially between GCE and GBD ($r = .97$), they remain below the multicollinearity threshold of $r = .98$, which means regression analysis can still proceed with care.

4.1.3 Unit Root Test

Table 4.4: Unit Root test results for time series data on GDP Growth Rate (GDPGR), Government Consumption Expenditure (GCE), Inflation Rate (INFR), Interest Rate (INTR), and Government Budget Deficit (GBD) from 1999 to 2023.

Test Title	Null Hypothesis	Variables	T-Stats	Probability	Decision
Augmented Dickey-Fuller	D(INFR) has a unit root	D(INFR)	-5.168558	0.0000	Reject null, stationary at first difference
Augmented Dickey-Fuller	D(GCE) has a unit root	D(GCE)	-2.100870	0.0372	Reject null, stationary at first difference

Test Title	Null Hypothesis	Variables	T-Stats	Probability	Decision
Augmented Dickey-Fuller	D(INTR) has a unit root	D(INTR)	-4.343387	0.0001	Reject null, stationary at first difference
Augmented Dickey-Fuller	GBD has a unit root	GBD	-4.027889	0.0003	Reject null, stationary at level
Augmented Dickey-Fuller	GDPGR has a unit root	GDPGR	-2.606241	0.0116	Reject null, stationary at level

Source: Eview output, 2024

The Augmented Dickey-Fuller (ADF) results show how the variables hold their stationarity, which is vital to avoid false regression outcomes. A series is called stationary when its mean, variance, and autocovariance stay the same over time, making statistical conclusions more reliable.

Inflation Rate (INFR), Government Consumption Expenditure (GCE), and Interest Rate (INTR) are not stationary at their original levels but become stationary once first differences are applied. For INFR, the ADF value (-5.168558) is below the critical points at all test levels ($p < .001$), which rejects the unit root null. In the same way, GCE (ADF = -2.100870, $p = .0372$) and INTR (ADF = -4.343387, $p < .001$) gain stationarity after first differencing. These variables are therefore integrated of order one, $I(1)$, meaning they may share long-term links (Engle & Granger, 1987).

On the other hand, Government Budget Deficit (GBD) and GDP Growth Rate (GDPGR) hold stationarity at their original levels. For GBD, the ADF statistic (-4.027889, $p = .0003$) rejects the null at the 1% mark. GDPGR also rejects the null (ADF = -2.606241, $p = .0116$) at the 5% mark. These variables are integrated of order zero, $I(0)$, showing that shocks on them are short-lived.

The mix of integration orders (I(0) and I(1)) points to the use of an Autoregressive Distributed Lag (ARDL) model for the study. ARDL can handle variables with different stationarity orders while giving both short-term and long-term estimates (Pesaran et al., 2001). This model makes it possible to look at both quick and lasting effects of the independent variables on GDP growth, producing broader policy guidance.

4.1.4 F-Bounds Test

Table 4.5: F-Bounds Test for Cointegration

Test Statistic	Value	Significance	I(0) Bound	I(1) Bound
F-statistic	30.78949	10%	3.03	4.06
k	4	5%	3.47	4.57
		2.50%	3.89	5.07
		1%	4.40	5.72

Source: Eview output, 2024

The F-Bounds check, an important step within the ARDL cointegration process, tests whether a lasting relationship exists among the variables. This method works well when variables have mixed integration orders, as seen here with some at I(0) and others at I(1).

The null claim (H_0) states that no long-term link (no cointegration) is present among the variables. The test value (F-statistic = 30.78949) is weighed against two bounds: the I(0) bound treats all variables as I(0), while the I(1) bound treats all as I(1). The rule is simple. If F-statistic < I(0) bound, we accept H_0 , meaning no cointegration. If I(0) bound < F-statistic < I(1) bound, the result is unclear. If F-statistic > I(1) bound, we reject H_0 and accept that cointegration exists.

Here, with $k = 4$ (four independent variables: GCE, INFR, INTR, GBD), the F-statistic (30.78949) is greater than the I(1) bound for every significance level. At 10%: $30.78949 > 4.06$. At 5%: $30.78949 > 4.57$. At 2.5%: $30.78949 > 5.07$. At 1%: $30.78949 > 5.72$.

Thus, we firmly reject the null of no cointegration ($p < .01$). This outcome shows strong proof of a lasting equilibrium link among GDP growth rate (GDPGR), government consumption expenditure (GCE), inflation rate (INFR), interest rate (INTR), and government budget deficit (GBD).

4.1.5 ARDL Error Correction Regression (Short-run Relationship Test)

Table 4.6: ECM Regression for Short-Run Relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	203.2143	11.72631	17.32978	0.0001
@TREND	-16.71347	0.927834	-18.01342	0.0001
D(GDPGR(-1))	1.249824	0.106887	11.69289	0.0003
D(GDPGR(-2))	0.216646	0.055374	3.912433	0.0174
D(GDPGR(-3))	-0.111634	0.051352	-2.173889	0.0954
D(GCE)	-0.006950	0.001576	-4.408576	0.0116
D(GCE(-1))	-0.012907	0.001619	-7.971675	0.0013
D(INTR)	-7.854205	0.472469	-16.62375	0.0001
D(INTR(-1))	3.197659	0.489593	6.531256	0.0028
D(GBD)	0.023096	0.002116	10.91388	0.0004
D(GBD(-1))	0.014810	0.001608	9.211421	0.0008
CointEq(-1)*	-2.712633	0.154593	-17.54694	0.0001
Model Statistics	Value			
R-squared	0.992422			
Adjusted R-squared	0.982003			
F-statistic	95.24733			
Prob(F-statistic)	0.000000			

Source: Eview output, 2024

The error correction model (ECM) output for short-run links among the variables is shown in the table above.

$D(\text{GDPGR}(-1))$ and $D(\text{GDPGR}(-2))$ stand for past values of GDP growth changes. Both are significant ($p < .05$), showing strong autoregressive traits. A one-unit rise in last year's GDPGR change lifts the current year by 1.25 units ($p < .001$), while a one-unit rise two years back adds 0.22 units ($p = .017$). This pattern means GDP growth holds strong short-run momentum. $D(\text{GDPGR}(-3))$ shows a small negative effect ($\beta = -0.111634$, $p = .095$), hinting at a slight reversal after three years.

$D(\text{GCE})$ and $D(\text{GCE}(-1))$ stand for current and past shifts in government consumption. Both have notable negative effects on GDP growth ($\beta = -0.006950$, $p = .012$; $\beta = -0.012907$, $p = .001$). This means that higher public spending in the short term may slow growth, likely from private sector crowding or poor resource use.

$D(\text{INTR})$ and $D(\text{INTR}(-1))$ show opposite signs for GDP growth. Current changes in interest rates reduce growth strongly ($\beta = -7.854205$, $p < .001$), but past changes boost growth ($\beta = 3.197659$, $p = .003$). This mixed pattern suggests that while immediate hikes hurt activity, delayed effects may help by better capital use or lower inflation.

$D(\text{GBD})$ and $D(\text{GBD}(-1))$ both have strong positive effects on GDP growth ($\beta = 0.023096$, $p < .001$; $\beta = 0.014810$, $p < .001$). This shows that higher budget deficits can drive short-term activity, which agrees with Keynesian fiscal ideas.

Error Correction Term ($\text{CointEq}(-1)^*$): The value (-2.712633, $p < .001$) marks how fast the model returns to long-run balance. Its negative and significant sign confirms stable long-term ties. The size means that any gap in GDP growth closes very fast, with an adjustment pace near 271% per period. This very high pace suggests over-adjustment, with possible swings before balance is reached.

R-squared (0.992422) and Adjusted R-squared (0.982003) are extremely high, meaning the model explains about 98.2% of GDPGR changes while adjusting for predictors. The F-statistic (95.24733, $p < .001$) clearly rejects the null that all slopes are zero, proving the short-run model is highly significant.

4.1.6 ARDL Long Run Form Test

Table 4.7: ARDL Long-Run Form: Levels Equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GCE	0.009279	0.001957	4.742169	0.0090
INFR	-0.937498	0.186345	-5.030991	0.0073
INTR	-0.657251	0.761325	-0.863299	0.4367
GBD	-0.001550	0.001429	-1.084756	0.3390

Source: Eview output, 2024

Multiple Regression Estimates:

The long-run ARDL model estimates the following regression equation:

$$GDPGR = \beta_0 + (0.009279)GCE + (-0.937498)INFR + (-0.657251)INTR + (-0.001550)GBD + \varepsilon$$

This equation outlines the long-run effects of the independent variables on GDP growth rate (GDPGR) in Nigeria. A one-unit rise in government consumption expenditure (GCE) corresponds to a 0.009279 rise in GDPGR ($\beta = 0.009279$, $p = .0090$), showing that larger public spending boosts growth over time. This outcome differs from the short-run negative link noted earlier, meaning that while higher spending might slow growth at first, it supports expansion later, likely through better infrastructure, stronger human capital, and improved public services. Inflation rate (INFR), on the other hand, has a clear negative impact ($\beta = -0.937498$, $p = .0073$), showing that a one percentage rise in inflation cuts growth by almost 0.94 percentage points. This highlights how unstable prices harm long-run economic strength by creating uncertainty, lowering buying power,

and affecting investment choices. Interest rate (INTR) also shows a negative link with growth ($\beta = -0.657251$, $p = .4367$), but this effect is not statistically strong. Government budget deficit (GBD) has a slight negative tie with growth ($\beta = -0.001550$, $p = .3390$), which is also not significant.

Model Fit and Significance:

The adjusted R-squared (0.982003) shows that about 98.20% of the changes in GDP growth are explained by the model when the number of predictors is considered. This high value means that GCE, INFR, INTR, and GBD together explain most of the variation in GDPGR. The F-statistic (95.24733, $p < .001$) rejects the idea that all coefficients are zero, proving that the model is significant as a whole. These results confirm that the model captures the key factors of GDP growth in Nigeria, stressing the need to account for these macroeconomic indicators in policy planning.

4.2 Test of Hypotheses

H0₁: Government consumption expenditure has no significant impact on GDP growth rate in Nigeria.

From the findings, H0₁ is rejected since ($\beta = 0.009279$, $t = 4.742169$, $p = .0090$), showing that the effect of government consumption expenditure on GDP growth rate is statistically meaningful at the 1% mark. This means that public spending exerts a positive and strong influence on Nigeria's long-run economic growth. For each one billion naira rise in government consumption expenditure, the GDP growth rate rises by around 0.009 percentage points, assuming all other factors remain unchanged.

H0₂: Inflation rate has no significant influence on the GDP growth rate in Nigeria.

From the outcome, we reject H0₂ because ($\beta = -0.937498$, $t = -5.030991$, $p = .0073$), and this makes it clear that the role of inflation rate on GDP growth rate is strongly significant at the 1% level. The negative coefficient means the link moves in the opposite way, where each one percentage

point increase in inflation rate pushes down GDP growth rate by almost 0.94 percentage points, while all other variables are kept unchanged. This result draws attention to how damaging unstable prices can be for Nigeria's economic progress. When inflation stays high, the value of money drops, people buy less, and resources are used in the wrong places. It also discourages savings and slows down fresh investments, creating a feeling of uncertainty that makes economic plans weaker and growth harder to achieve. The strong negative sign shows clearly that controlling prices and keeping them stable is a basic and necessary step for achieving steady and long-term economic growth in Nigeria.

H0₃: Interest rate has no significant effect on GDP growth rate in Nigeria.

From the findings, we do not reject H0₃ since ($\beta = -0.657251$, $t = -0.863299$, $p = .4367$), which means that interest rate does not show a clear and proven effect on GDP rise at the common 5% rule ($\alpha = .05$). The sign of the value shows a downward tie, hinting that when interest rates climb, economic growth seems to slow, yet this tie is not firmly backed by data. The result tells that swings in Nigeria's interest rates during the study period did not bring any firm or straight change to GDP growth moves. This can come from weak spread of monetary policy, low reaction of private investment to interest rate shifts, or stronger push from other economic parts that shape growth tracks in Nigeria.

H0₄: Government budget deficit has no significant impact on GDP growth rate in Nigeria.

From the findings, we keep H0₄ since ($\beta = -0.001550$, $t = -1.084756$, $p = .3390$), showing that the link between government budget gap and GDP growth is not proven at the usual 5% rule ($\alpha = .05$). The value points to a weak negative tie between budget gap and economic growth, but this tie is not strong in a statistical sense. The result shows that the size of Nigeria's fiscal gap within the study period did not play a clear role in shaping growth results. This may look odd when placed

against theory that connects fiscal gaps with economic trends. Yet, it hints that the effect of budget gaps may rest on how the gaps are funded, what they pay for, and the broad state of the economy.

4.3 Diagnosis Testing

Table 4.8: Diagnostic Tests for ARDL Model

Test Type	Variables	Test Statistic	Probability	Obs*R-squared	Prob. Chi-Square
Breusch-Godfrey Serial Correlation LM Test	Residuals	F(2,2) = 1.453593	0.4076	11.84869	0.2673
Heteroskedasticity Test: Breusch-Pagan-Godfrey	Residuals	F(15,4) = 0.553216	0.8201	13.49500	0.5641
Normality Test (Jarque-Bera)	Residuals	JB = 0.682146	0.711007	-	-
Multicollinearity Test (VIF)	GDPGR(-1)	-	-	-	1.287387
	GDPGR(-2)	-	-	-	3.032751
	GDPGR(-3)	-	-	-	2.552546
	GDPGR(-4)	-	-	-	4.516883
	GCE	-	-	-	1.940002
	GCE(-1)	-	-	-	3.731408
	GCE(-2)	-	-	-	1.804883
	INFR	-	-	-	2.682077
	INTR	-	-	-	4.947524
	INTR(-1)	-	-	-	4.757538

Test Type	Variables	Test Statistic	Probability	Obs*R-squared	Prob. Chi-Square
	INTR(-2)	-	-	-	1.285942
	GBD	-	-	-	1.581951
	GBD(-1)	-	-	-	1.102654
	GBD(-2)	-	-	-	1.143754

Source: Eview output, 2024

Serial Correlation (Autocorrelation):

The Breusch-Godfrey LM check looks at whether the leftover errors are tied to their own past values. The null claim says there is no serial link for up to 2 past points. With $F(2,2) = 1.454$ ($p = .408$) and $\chi^2(2) = 11.849$ ($p = .267$), we keep the null. This shows there is no clear serial link in the errors, which is key for fair and clear estimates (Godfrey, 1978). Since no autocorrelation is found, the model seems to follow the time structure of GDP growth in a proper way. It proves that the time steps are free from each other, so our error ranges and test checks stay sound. The result means past error values do not shape current ones, confirming that the model's time setup is correct.

Heteroskedasticity:

The Breusch-Pagan-Godfrey check looks if the leftover errors have the same spread (homoscedastic). The null claim says the spread is even. With $F(15,4) = 0.553$ ($p = .820$) and $\chi^2(15) = 13.495$ ($p = .564$), we keep the null. This means no clear uneven spread, so our error ranges and trust bounds are safe (Breusch & Pagan, 1979). The model keeps even spread for all predictor levels. This shows our test points from the model stay correct as the even-spread rule holds. The

even spread of errors means the model's strength to explain is stable for all values of the input parts, which makes our results more sound.

Normality:

The Jarque-Bera check looks at whether leftover errors follow normal spread. With $JB = 0.682$ ($p = .711$), we keep the null of normal spread. This meets an important rule for test points and trust ranges (Jarque & Bera, 1987). Normal spread means our model's errors are random, which lifts the truth of our claims about GDP growth drivers. The bell-shaped spread of errors shows the model catches key data trends, leaving only random parts. This supports the trust in our tests and trust bounds since they rest on the normal spread rule.

Multicollinearity:

Variance Inflation Factors (VIFs) check how much extra spread comes from multicollinearity. When $VIFs > 10$, it means serious multicollinearity (Hair et al., 2010). All factors have $VIFs < 5$, which means no strong multicollinearity. The highest VIFs are for INTR (4.95), INTR(-1) (4.76), and GDPGR(-4) (4.52), yet these are below the danger mark. These mild VIF scores show our predictor parts are not too tied to each other, so we can still find their own effects on GDP growth clearly. Since there is no strong multicollinearity, our coefficient values are steady, and the model can place GDP growth shifts on the right predictors.

4.4 Discussion of Findings

Research Question 1: What is the relationship between government consumption expenditure (GCE) and the GDP growth rate in Nigeria?

The outcomes from the empirical analysis show that, over the extended study period, government consumption spending has a clear positive tie with Nigeria's GDP growth rate. The long-run coefficient ($\beta = 0.009279$, $p = .0090$) points to a growth-boosting effect, even though this may

appear odd at first due to the opposite sign noted in the short-run pattern of the error correction setup. The numbers hint that government spending does not give quick gains in output, yet its steady and pooled effect drives economic growth when viewed over time. This long-term lift fits with Keynesian thinking, which sees public spending as a tool to push demand in slow economies. Similar views appear in Chandana et al. (2020), who found a growth link between capital spending and economic rise. Elaigwu and Khikando (2024) also noted that both capital and recurrent spending lift GDP per person. Still, Onifade et al. (2020) showed a reverse link, where recurrent spending pulled growth down, proving that fiscal mix and study design can change how results are read. These gaps may come from how time, spending types, or methods are set in each study.

The negative short-run link may mean that private investment is pushed aside for a while or that fiscal use is not done well. Yet, the shift toward a positive path over longer spans, likely through better infrastructure or stronger public systems, shows that gains can emerge later. Thus, this mixed behaviour calls on policymakers to follow steady fiscal plans that focus on long-term gains rather than quick results. The takeaway is that public spending may seem to drag today but can fuel future growth when tied to solid capital projects and improved institutions.

Research Question 2: How does inflation rate (INFR) influence the GDP growth rate in Nigeria?

The ARDL outcomes highlight a harmful effect of inflation on GDP growth, shown by the clear negative coefficient ($\beta = -0.937498$, $p = .0073$). This means that a 1% rise in inflation almost cuts the growth rate by the same share. Both the size and direction of this impact agree with standard macroeconomic views that point to how rising prices harm growth through weaker buying power, disturbed investment plans, and higher economic risk.

These results match the claims of Zhang et al. (2021), who warned that public spending not tied to real productive use can worsen inflation. Baloch et al. (2021) also found that fiscal behaviour drives inflation persistence, mainly in economies going through energy shifts and financial changes. In this case, the moderate link between GCE and inflation ($r = .49$) hints that high government spending could be feeding price increases.

This link creates a policy balance problem for fiscal managers: how to use public spending to boost demand without letting inflation weaken the economy. The issue is not just the size of spending but how well it is aimed, making sure outlays match the economy's capacity and sector needs. The key point is that poor fiscal targeting may turn a growth tool into an inflation driver, more so in fragile settings like Nigeria.

Research Question 3: What is the effect of interest rate (INTR) on the GDP growth rate in Nigeria?

From the ARDL long-run outputs, interest rates show a weak and statistically unproven negative link with GDP growth ($\beta = -0.657251$, $p = .4367$). This means that, over the review period, changes in interest rates had little direct force on output growth. Such a result supports the remarks of Cojocaru et al. (2016), who argue that in economies with shallow finance or in post-transition states, structural gaps in financial development often outweigh the influence of interest rate changes on growth.

Gründler and Potrafke (2019) add that weak institutions, including high corruption, can dull the expected effects of monetary policies on the larger economy. The low growth reaction to interest rate shifts, despite a strong negative link with GCE ($r = -.80$), signals a policy scene where monetary tools might have taken a back seat to heavy fiscal spending.

In contrast, the short-run estimates tell a different story, showing that sudden rate hikes strongly cut output ($\beta = -7.854205$, $p < .001$), but earlier rate rises oddly drive positive effects later ($\beta = 3.197659$, $p = .003$). This timing shows that higher rates first tighten finance but can later bring balance or push productivity shifts that lift growth. The pattern reveals that time lags matter when judging how well interest rate policies work.

Research Question 4: What is the impact of government budget deficit (GBD) on the GDP growth rate in Nigeria?

The long-run coefficient connecting government budget deficits with GDP growth turned negative and statistically unclear ($\beta = -0.001550$, $p = .3390$), pointing to a weak and unstable role in driving economic progress. Even though GCE and GBD display a near-complete correlation ($r = .97$), indicating that fiscal gaps mainly arise from rising outlays, these deficits seem not to sustain growth outcomes in any real sense over the studied period. This aligns with Ugwu et al. (2021), who observed fiscal strain more as a burden on external balance than a trigger for domestic output. But it contrasts with Ibrahim (2021), who stressed the drag that debt-driven deficits exert on developing states. Interestingly, the short-run picture shifts: positive and statistically solid coefficients ($\beta = 0.023096$, $p < .001$ and $\beta = 0.014810$, $p < .001$) reveal that deficit-backed injections may spark quick yet short-lived output gains. This split shows that while fiscal looseness can fuel brief demand surges, its strength as a growth tool depends on spending quality, fiscal control, and strong institutional backing. Echoing Rodríguez-Pose & Garcilazo (2015), the evidence suggests that governance standards, not mere spending volume, shape returns on public outlay. Thus, Nigeria's deficit pattern, largely pushed by recurrent GCE, may cause fleeting growth bursts but cannot lock in steady expansion without targeted reforms.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1 Summary of findings

This study checked how government consumption spending connects with Nigeria's economic output. The answers to each research question are given below:

1. Government consumption spending pushes GDP growth upward in the long span, but its short-run effect turns downward.
2. Inflation rate holds a firm negative tie with the GDP growth rate of Nigeria.
3. Interest rate shows no clear long-term role in shaping GDP growth, yet short-term shifts bring visible effects.
4. The government budget gap does not show a solid long-run impact on GDP growth, but short-term movements create positive signs.

5.2 Conclusion

In conclusion, this work challenges common thoughts on how fiscal rules act in Nigeria. The lasting positive link between public consumption outlay and economic rise, even with short-term drops, shows that steady spending can lead to real progress over time. This fits with the Keynesian view that public outlay can lift total demand and drive activity, mainly in growing nations with poor infrastructure. Still, the hard negative pull of inflation on growth stands as a key block to fiscal push. As public spending often ties with high inflation ($r = .49$), leaders must balance growth plans with price control. The weak long-run roles of interest rate and budget gap, though they show short-run signs, mean that the shape, focus, and source of spending weigh more than the total sum or deficit. Thus, fiscal success in Nigeria leans less on spending size and more on core factors that turn such outlay into real growth gains.

5.3 Recommendations

Considering the conclusions of the study, the following recommendations are set forth:

1. The Nigerian government should keep planned public consumption spending for long-term growth while lifting spending quality through open budget plans, strict project checks, and the use of performance-based budgets to raise returns from public funds.
2. Monetary bodies should give priority to stable prices by aligning fiscal and monetary steps, making sure public spending is well timed and aimed at sectors that build output to curb inflation while aiding growth.
3. Fiscal managers should create lasting funding plans for public spending, focusing on domestic resource drive by better tax control, widening the tax net, and cutting tax leaks to limit heavy use of deficit finance and its long-term harm.
4. The government should reshape how consumption outlay is shared by placing more weight on sectors with high growth effects like roads, schools, health, and tech, while cutting shares to weak-yielding areas.

5.4 Contributions to Knowledge

The study adds notable value to the knowledge base on fiscal policy and economic growth:

It gives real proof on the time-based effects of public consumption outlay in Nigeria, showing that short-run effects may be negative while long-run effects become positive, thus offering a clearer view of how fiscal policy works over time.

Through the use of ARDL modeling on mixed-order integrated data, the study presents a method tip for testing complex macro links with varied stationarity traits, improving tools for similar economic checks.

The results point to both joint and opposing links between public consumption spending and other macro factors like inflation, interest rate, and budget gap, creating a fuller view of Nigeria's macro trends.

It questions simple claims on fiscal policy strength by showing that institutions, spending mix, and use efficiency shape how public outlay links with economic growth.

5.5 Areas suggestions for further studies

1. Look deep into how government use of funds spreads across each sector to see which slice of spending gives the highest and most stable growth yield in Nigeria.
2. Trace how government outlays mix with private capital to know if they push away private flow or open doors for new ventures under shifting economic scenes.
3. Watch how government outflow shifts the gap between rich and poor and how it moves poverty rates to judge the sharing weight of fiscal choices in Nigeria.
4. Probe how government fund use ties with the strength of governance to see how control and order affect the reach of fiscal plans.
5. Search for turning points in the tie between government fund use and growth to pick the right level of spending that drives progress without bad side effects.

Reference

- Akadiri, S. S., Seraj, M., & Akadiri, A. C. (2018). Testing the role of tourism and human capital development in economic growth. *Tourism Management Perspectives*, 26, 96–105.
- Anzaku, M. M. (2019). *Impact of public expenditure on economic growth in Nigeria* [Master's dissertation, Nasarawa State University].
- Broadberry, S., Campbell, B. M. S., & Klein, A. (2015). *British economic growth, 1270–1870*. Cambridge University Press.
- Chandana, A., Jibir, A., & Musa, A. (2020). Impact of government expenditure on economic growth in Nigeria, 1970–2019. *CBN Journal of Applied Statistics (JAS)*, 11(2), 139–174.
- Cojocaru, L., Falaris, E. M., & Hoffman, S. D. (2016). Financial system development and economic growth in transition economies. *Emerging Markets Finance and Trade*, 52(1), 156–175.
- D'Agostino, G., Dunne, J. P., & Pieroni, L. (2016). Government spending, corruption, and economic growth. *World Development*, 84, 58–72.
- Duruibe, S. C., Chigbu, E. E., Ejezube, E. E., & Nwauwa, P. G. (2020). An evaluation of public expenditure and economic growth in Nigeria using the sectorial economic function approach. *European Scientific Journal*, 16(7), 142–156. <https://doi.org/10.19044/esj.2020.v16n7p142>
- Elaigwu, B. E., & Khikando, A. B. (2024). Government expenditure and economic growth in Nigeria (2005–2022). *International Journal of Sustainable Development*, 7(3), 11–27. <https://doi.org/6472-039024-732>
- Enwefah, D. M., & Maku, A. O. (2024). The impact of government expenditure on private consumption in Nigeria: A quantitative research approach. *International Journal of Humanities Social Science and Management (IJHSSM)*, 4(6), 994–1005.
- Ezeanyagu, U. K. (2013). *Impact of government expenditure on Nigerian economic growth (1981-2010)* [Bachelor's thesis, Caritas University].
- Gründler, K., & Potrafke, N. (2019). Corruption and economic growth: New empirical evidence. *European Journal of Political Economy*, 60, 101–116.
- Ibrahim, C. (2021). Corruption, public debt, and economic growth: Evidence from developing countries. *International Journal of Development Issues*, 20(2), 175–193.
- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. Palgrave Macmillan.

- Meyer, D., & Shera, A. (2017). The impact of remittances on economic growth: An econometric model. *Economía*, 18(2), 147–155.
- Nwankwo, A. E., Nwakoby, C. N. I., Anyanwu, F. A., & Ananwude, A. C. (2022). Effect of federal government expenditure on economic growth in Nigeria. *Journal of Innovations and Sustainability*, 6(2), 6.
- Nyasha, S., & Odhiambo, N. M. (2019). The impact of public expenditure on economic growth: A review of international literature. *Folia Oeconomica Stetinensia*, 19(2), 81–101.
- Ogundari, K., & Awokuse, T. O. (2018). Human capital contribution to economic growth in Sub-Saharan Africa: Does health status matter more than education? *Economic Analysis and Policy*, 58, 131–140.
- Onifade, S. T., Çevik, S., Erdoğan, S., Asongu, S., & Bekun, F. V. (2020). An empirical retrospect of the impacts of government expenditures on economic growth: New evidence from the Nigerian economy. *Journal of Economic Structures*, 9(6).
- Rodríguez-Pose, A., & Garcilazo, E. (2015). Quality of government and the returns of investment: Examining the impact of cohesion expenditure in European regions. *Regional Studies*, 49(8), 1274–1288.
- Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002–1037.
- Samargandi, N., Fidrmuc, J., & Ghosh, S. (2015). Is the relationship between financial development and economic growth monotonic? Evidence from middle-income countries. *World Development*, 68, 66–81.
- Ugwu, E., Nwosa, P., & Ehinomen, C. (2021). Evaluating government consumption expenditure effect on current account in Nigeria. *Journal of Accounting and Management*, 11(2), 226–239.
- Vigo, D. V., Pendakur, K., & Thornicroft, G. (2019). Disease burden and government spending on mental health. *The Lancet Public Health*, 4(1), e15–e25.
- Zhang, D., Mohsin, M., & Rasheed, A. K. (2021). Public spending and green economic growth in the BRI region. *Energy Policy*, 146, 1117–1128.

Reference

- Abu, N., & Abdullahi, U. (2010). Government expenditure and economic growth of Nigeria, 1970–2008: A disaggregated analysis. *Business and Economic Journal*, 2(4), 120–135.
- Agénor, P. R., & Canuto, O. (2015). Gender equality and economic growth in Brazil. *Journal of Macroeconomics*, 45, 157–175.
- Akadiri, S. S., Seraj, M., & Akadiri, A. C. (2018). Testing the role of tourism and human capital development in economic growth. *Tourism Management Perspectives*, 26, 96–105.
- Akpan, U. F., & Abang, D. E. (2013). Does government spending spur economic growth? Evidence from Nigeria. *Journal of Economics and Sustainable Development*, 4(9), 36–52.
- Akwagyiram, A. (2024, October 17). Nigeria seeing positive results from fiscal reforms, World Bank says. *Reuters*.
- Baloch, M. A., Ozturk, I., & Bekun, F. V. (2021). Modelling the dynamic linkage between financial development, energy innovation, and environmental quality. *Business Strategy and the Environment*, 30(6), 2896–2909.
- Broadberry, S., Campbell, B. M. S., & Klein, A. (2015). *British economic growth, 1270–1870*. Cambridge University Press.
- Central Bank of Nigeria. (2013). *Fiscal Policy*.
- Chandana, A., Jibir, A., & Musa, A. (2020). Impact of government expenditure on economic growth in Nigeria, 1970–2019. *CBN Journal of Applied Statistics (JAS)*, 11(2), 139–174. [invalid URL removed]
- Chirwa, T. G., & Odhiambo, N. M. (2016). What Drives Long-run Economic Growth? Empirical Evidence From South Africa. *Economia Internazionale/International Economics*, 69(4), 429–456.
- Cojocaru, L., Falaris, E. M., & Hoffman, S. D. (2016). Financial system development and economic growth in transition economies. *Emerging Markets Finance and Trade*, 52(1), 156–175.
- d'Agostino, G., Dunne, J. P., & Pieroni, L. (2016). Government spending, corruption, and economic growth. *World Development*, 84, 58–72.
- Devarajan, S., Swaroop, V., & Zou, H. F. (1996). The composition of public expenditure and economic growth. *Journal of Monetary Economics*, 37(2), 313–344.
- Egbejule, E. (2024, December 15). How Lagos's nightlife lost its famous energy. *Financial Times*.

Elaignwu, B. E., & Khikando, A. B. (2024). Government expenditure and economic growth in Nigeria (2005–2022). *International Journal of Sustainable Development*, 7(3), 11–27. [invalid URL removed]

Enwefah, D. M., & Maku, A. O. (2024). The impact of government expenditure on private consumption in Nigeria: A quantitative research approach. *International Journal of Humanities Social Science and Management (IJHSSM)*, 4(6), 994–1005.

Gründler, K., & Potrafke, N. (2019). Corruption and economic growth: New empirical evidence. *European Journal of Political Economy*, 60, 101–116.

Ibrahim, C. (2021). Corruption, public debt, and economic growth: Evidence from developing countries. *International Journal of Development Issues*, 20(2), 175–193.

Mazzucato, M. (2018). *The value of everything: Making and taking in the global economy*. Hachette UK.

Mbachu, D., & Pilling, D. (2023, July 5). Will shock therapy revive Nigeria's economy—or sink it further? *Financial Times*.

Meyer, D., & Shera, A. (2017). The impact of remittances on economic growth: An econometric model. *Economia*, 18(2), 147–155.

Nwankwo, A. E., Nwakoby, C. N. I., Anyanwu, F. A., & Ananwude, A. C. (2022). Effect of federal government expenditure on economic growth in Nigeria. *Journal of Innovations and Sustainability*, 6(2), 6. [invalid URL removed]

Nyasha, S., & Odhiambo, N. M. (2019). The impact of public expenditure on economic growth: A review of international literature. *Folia Oeconomica Stetinensia*, 19(2), 81–101.

Ogundari, K., & Awokuse, T. O. (2018). Human capital contribution to economic growth in Sub-Saharan Africa: Does health status matter more than education? *Economic Analysis and Policy*, 58, 131–140.

Ogundipe, O. (2013). Government spending and economic growth in Nigeria; evidence from disaggregated analysis. (Unpublished article).

Onifade, S. T., Çevik, S., Erdoğan, S., Asongu, S., & Bekun, F. V. (2020). An empirical retrospect of the impacts of government expenditures on economic growth: New evidence from the Nigerian economy. *Journal of Economic Structures*, 9(6).

Peacock, A., & Wiseman, J. (2024). *The growth of public expenditure in the United Kingdom*. Routledge.

Rodríguez-Pose, A., & Garcilazo, E. (2015). Quality of government and the returns of investment: Examining the impact of cohesion expenditure in European regions. *Regional Studies*, 49(8), 1274–1288.

Samargandi, N., Fidrmuc, J., & Ghosh, S. (2015). Is the relationship between financial development and economic growth monotonic? Evidence from middle-income countries. *World Development*, 68, 66–81.

Ugwu, E., Nwosa, P., & Ehinomen, C. (2021). Evaluating government consumption expenditure effect on current account in Nigeria. *Journal of Accounting and Management*, 11(2), 226–239.

Udude, C. C., Amadi, A. O., & Amadi, A. (2023). Re-evaluation of government expenditure on economic growth in Nigeria. *South East Journal of Political Science*, 9(2).

Vigo, D. V., Pendakur, K., & Thornicroft, G. (2019). Disease burden and government spending on mental health. *The Lancet Public Health*, 4(1), e15–e25.

Zhang, D., Mohsin, M., & Rasheed, A. K. (2021). Public spending and green economic growth in the BRI region. *Energy Policy*, 146, 1117–1128.