

**T.C.
ISTANBUL GEDİK UNIVERİSTY
INSTITUTE OF GRADUATE STUDIES**



**IMPACT OF STOCK MARKET DEVELOPMENT ON THE
ECONOMIC GROWTH IN NIGERIA (1990-2023)**

MASTER'S THESIS

Jesupelumi Albert OJENIYI

Department of Business Administration

English Business Administration Thesis Master's Program

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DECLARATION

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Jesupelumi Albert OJENIYI



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ABBREVIATIONS

RGDP	: Real Per Capital Income
MCAP	: Market Capitalization
FDI	: Foreign Direct Investment
TO	: Turnover
VLT	: Total Volume of Listed Domestic Companies
VAR	: Vector Autoregressive Model



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IMPACT OF STOCK MARKET DEVELOPMENT ON THE ECONOMIC GROWTH IN NIGERIA

ABSTRACT

Financial globalization entails the marketization of the domestic banking industry and the capital account in order to integrate a nation's financial system into international financial networks. The world stock market is one of the most vital parts in the global economy, and it forms an avenue for capital in various opportunities for investment. Over the last couple of years, the sum of the market capitalization of world stock exchanges has achieved a level in excess of \$100 trillion, which reflects the rising role taken by the equity markets in economic development and growth. Comparing the Nigerian stock exchange to counterparts in more developed economies, it has remained less developed than the NSE, which was founded in 1961. The general objective of this study will be to assess the effect that stock market development has on Nigeria's economic growth. Two testable hypothesis was carried out in the study. The study adopted the endogenous growth theory. A quantitative research design was used, focusing on the analysis of the effect of stock market development on the economic growth of Nigeria. The scope of the research encompasses a period of thirty years (1990-2023), a period selected to capture historical patterns, reforms, and structural changes in Nigeria's stock market. Various econometric techniques are being utilized for this time-series data analysis to ensure that the study is not only robust but also insightful with regards to how the stock market can affect economic growth. Unit root test, ganger causality, Johansen cointegration and vector autoregressive estimate was also carried out as inferential statistics with the use of SPSS software. The study found several significant results with respect to the relationship between stock market development and economic growth in Nigeria: The VAR results indicated that there was no significant causality between stock market size (MCAP) and economic growth (GDP). The study found a significant negative relationship between stock market liquidity (VLC) and economic growth (GDP), indicating that increased liquidity may lead to volatility and instability, rather than fostering long-term growth. Foreign Direct Investment (FDI) was found to have a positive, yet statistically insignificant, relationship with GDP. This finding suggests that while FDI can enhance market efficiency by bringing in capital and advanced financial practices, its effect on Nigeria's economic growth is limited by structural issues such as poor infrastructure and political instability. Recommendations suggest that The Nigerian stock market should focus on improving market transparency and reducing information asymmetry. Policymakers should implement measures to reduce excessive liquidity-driven volatility in the market.

Keywords: *Stock market, Capital market, Economic growth, Gross domestic product*

NİJERYA'DA BORSA GELİŞİMİNİN EKONOMİK BÜYÜMEYE ETKİSİ

ÖZET

Finansal küreselleşme, bir ülkenin finansal sistemini uluslararası finansal ağlara entegre etmek için yerel bankacılık sektörünün ve sermaye hesabının piyasalaştırılmasını gerektirir. Dünya borsası, küresel ekonominin en hayati parçalarından biridir ve çeşitli yatırım fırsatlarında sermaye için bir yol oluşturur. Son birkaç yılda, dünya borsalarının piyasa kapitalizasyonunun toplamı, 100 trilyon doları aşan bir seviyeye ulaşmıştır; bu, hisse senedi piyasalarının ekonomik kalkınma ve büyümede üstlendiği artan rolü yansıtmaktadır. Nijerya borsası, daha gelişmiş ekonomilerdeki emsalleriyle karşılaştırıldığında, 1961'de kurulan NSE'den daha az gelişmiş kalmıştır. Bu çalışmanın genel amacı, borsa gelişiminin Nijerya'nın ekonomik büyümesi üzerindeki etkisini değerlendirmek olacaktır. Çalışmada iki test edilebilir hipotez yürütülmüştür. Çalışma, içsel büyüme teorisini benimsemiştir. Nijerya'nın ekonomik büyümesi üzerinde borsa gelişiminin etkisinin analizine odaklanan nicel bir araştırma tasarımı kullanılmıştır. Araştırmanın kapsamı, Nijerya borsasındaki tarihsel kalıpları, reformları ve yapısal değişiklikleri yakalamak için seçilen otuz yıllık bir dönemi (1990-2023) kapsamaktadır. Bu zaman serisi veri analizi için çeşitli ekonometrik teknikler kullanılmakta olup, çalışmanın yalnızca sağlam değil aynı zamanda borsanın ekonomik büyümeyi nasıl etkileyebileceği konusunda da içgörülü olmasını sağlamaktadır. Birim kök testi, ganger nedenselliği, Johansen eşbütünlüğü ve vektör otoregresif tahmini de SPSS yazılımı kullanılarak çıkarımsal istatistikler olarak gerçekleştirilmiştir. Çalışma, Nijerya'daki borsa gelişimi ile ekonomik büyüme arasındaki ilişkiye ilişkin birkaç önemli sonuç buldu: VAR sonuçları, borsa büyüklüğü (MCAP) ile ekonomik büyüme (GSYİH) arasında önemli bir nedensellik olmadığını gösterdi. Çalışma, borsa likiditesi (VLC) ile ekonomik büyüme (GSYİH) arasında önemli bir negatif ilişki buldu ve bu da artan likiditenin uzun vadeli büyümeyi teşvik etmek yerine oynaklığa ve istikrarsızlığa yol açabileceğini gösterdi. Yabancı Doğrudan Yatırımın (FDI) GSYİH ile pozitif ancak istatistiksel olarak önemsiz bir ilişkisi olduğu bulundu. Bu bulgu, FDI'nin sermaye ve gelişmiş finansal uygulamalar getirerek piyasa verimliliğini artırabilmesine rağmen, Nijerya'nın ekonomik büyümesi üzerindeki etkisinin zayıf altyapı ve siyasi istikrarsızlık gibi yapısal sorunlarla sınırlı olduğunu göstermektedir. Öneriler, Nijerya borsasının piyasa şeffaflığını iyileştirmeye ve bilgi asimetrisini azaltmaya odaklanması gerektiğini göstermektedir. Politika yapıcılar, piyasadaki aşırı likidite kaynaklı oynaklığı azaltmak için önlemler uygulamalıdır.

Anahtar kelimeler: *Borsa, Sermaye piyasası, Ekonomik büyüme, Gayri safi yurtiçi hasıla*

1. INTRODUCTION

1.1 Preamble

Financial globalization entails the marketization of the domestic banking industry and the capital account in order to integrate a nation's financial system into international financial networks. The development of banks, stock markets, and other financial institutions emerged because of the need to finance large technological inventions that individuals could not fund (Akram, 2016). According to Nathaniel, Omojolaibi, and Ezeh (2020), capital markets are a component of the financial system that drive economic growth in contemporary economies. Stock markets are essential among many financial markets for three primary reasons: the liquidity they provide to financial assets, the important capital flows they channel, and the fact that they are particularly useful sources of information for investors (Prats and Sandoval, 2020). In addition to facilitating the prudent and efficient allocation of surplus funds, the stock market serves as a conduit for global investment and the influx of foreign capital towards the advancement of citizen-benefiting projects (Owolabi and Motilewa, 2015), as referenced in (Nathaniel, Omojolaibi, & Ezeh, 2020). Various literature has recognized the role of the stock market in enhancing liquidity, providing information on enterprises, and enabling the diversification of risk. For instance, Angaye and Frank (2020) indicate that a good capital market can have a very significant actual effect on economic growth in the way financial resources are allocated among sectors.

The world stock market is one of the most vital parts in the global economy, and it forms an avenue for capital in various opportunities for investment. Over the last couple of years, the sum of the market capitalization of world stock exchanges has achieved a level in excess of \$100 trillion, which reflects the rising role taken by the equity markets in economic development and growth. The United States continues to lead the charts, as home to giant exchanges such as NYSE and NASDAQ, when it comes to market size and liquidity. Emerging markets in general, but specifically those of Asia and Africa, are also growing down the curve, as they

offer exclusive investment opportunities driven by demographic shifts and economic reforms. Although these markets have the potential for growth, geopolitical risk, inflationary pressures, and exchange rate volatility are some of the factors that impinge on investor confidence in the stability of such markets. A recent study by Ramelli and Wagner, 2020, tries to show how external shocks to the economy influence stock returns and, therefore, indicates that investors should consider the risk factors while engaging emerging markets.

One of the primary topics of interest in economic research studies, particularly in the economies of West African nations, is how the rise of stock markets and economic expansion are connected. This is where the differences between West Africa and other regions can be seen in terms of market maturity and their influence on economic growth. Notably, stock markets in West Africa have grown, with the Ghanaian and Nigerian stock exchanges being the most advanced. The West African area has implemented a number of reforms to increase investor trust and market efficiency after realizing the significance of stock markets to economic growth.

According to Ibrahim and Mohammed (2020), this process had integrated the stock markets within the WAEMU in order to make a more robust financial system in the region, a view supported by Alfred et al. (2023). As one of the largest within the West African markets, NGX is typified by high volatility, hence very susceptible to macroeconomic shocks. Recent studies have, however, pointed out that even with NGX's impressive returns in double digits, such as over 39% year-to-date in early 2024, there are present challenges of liquidity and investor confidence against a background of increased inflation rates and depreciation of currencies (ThisDayLive,2024).

In Africa, the stock market is taken to be one of the significant means for savings mobilization and efficient allocation of resources, which is an important economic development process. Stock markets, still at best fragmented and rudimentary compared with international standards, have become an increasingly important player in African economic development. Stock exchanges have mushroomed around the continent; by 2024 a cumulative total of 29 formal stock markets were active in all parts of the continent (Wikipedia, 2024). Many of the markets suffer from low levels of liquidity and limited investors. Even the

Johannesburg Stock Exchange in South Africa, for instance, is one of the most advanced on the continent, offering a variety of securities and a respectable volume of activity, but it still keeps up with less active and liquid exchanges in Ghana and Tanzania. According to Ntim et al. (2012), most of the African stock exchanges tend to be inefficient in general because their small and thin capital markets make poor potential to accumulate capital and economic growth.

Nigeria's stock market is characterized by a lackluster regulatory environment, excessive macroeconomic volatility, and shortcomings in information and disclosure which reduce stock market efficiency and development, lowering local and foreign investors' confidence and patronage. Low liquidity, increased trading expenses, volatile inflation and currency rates, slower domestic product growth, infrequent trading, problems with information and disclosure, and political unpredictability continue to plague the stock market. Nigeria is the biggest economy in Africa, boasting a gross domestic product of over \$500 billion (Abdullahi et al., 2022). Economically speaking, the country has largely been boosted in its growth by many aspects that relate to oil exports, agriculture, and services. However, there are key problems that the economy has faced; these include high levels of unemployment, high rates of inflation, and large informal sectors (Alfred et al., 2023).

There is empirical evidence showing a positive relationship between Nigeria's economic expansion and stock market development, such as that market capitalization, total value of transactions, and the all-share index positively influence GDP (Abdullahi et al., 2022). Other studies also suggest that stock market indicators found relating positively with the growth in GDP included market capitalization and turnover ratios (Popoola, 2014). On the other hand, a few studies such as Bamidele (2019) indicate that, among other variables, the reliance on the revenue acquired from oil may render the significance of a strong stock market to be quite insignificant. Through mechanisms including increased liquidity, risk diversification, and capital formation, The economy grows as a result of the stock market. However, the connection between economic growth and the stock market's evolution differs based on several circumstances, including investor confidence, regulatory framework, and market efficiency. Therefore, this duality highlights the necessity for a comprehensive knowledge of the following: how external influences affect the stock industry ability to propel economic expansion.

1.2 Statement of Research Problem

Because it gives them a way to make money. and capital production, the market for stocks plays a crucial role in a nation's economic development. Comparing the Nigerian stock exchange to counterparts in more developed economies, it has remained less developed than the NSE, which was founded in 1961. The fact that this has been the case for a considerable amount of time raises questions about how well such a market would stimulate economic expansion. Although the performance of the market is expected to remain a reliable gauge of economic health, it is still unclear precisely how Nigeria's stock market's evolution connects to economic expansion. Most studies on the influence of financial market variables on economic growth, such as that by Olanrewaju et al. (2022), do not acknowledge some other long-term structural issues in the Nigerian stock market which deter the market from achieving its potential. This therefore, forms the basis for the inquiry into whether the development of the stock market significantly influences the growth of an economy, particularly in Nigeria between 1990 and 2023.

The lowest level of patronage from investors, both private and institutional has been a sustained challenge. Some of the major reasons for such low participation levels include low levels of financial literacy, a weakness in the regulatory framework, and the absence of investment-friendly policies. This interaction has a limited impact on the market's depth and capacity to draw in the foreign direct investment needed for expansion. Akinlo and Egbetunde (2021) have noted that the culture of volatility and speculation which has typified the Nigeria stock market over the years is one sure factor that discourages long-term investment. There is a need for an empirical research Considering the correlation between economic development and stock market participation rates outcomes because the existing literature has not examined how such low participation affects the economy's growth trajectory over the long term.

The inefficiency of the NSM is another issue as such inefficiency has been traced to a number of causes including poor corporate governance, lack of effective regulatory oversight, and market manipulation. These inefficiencies have dampened investor confidence and retarded the development of an effective financial market. Market inefficiency restricts the security exchange's ability to stimulate economic

development and blocks off channels that businesses could use to obtain funding. In spite of such studies as Emeni and Omoniyi (2020) which identified weaknesses in regulatory frameworks, little effort is made to quantify the wider macroeconomic implications of an inefficient stock market on economic growth in Nigeria. Therefore, by providing a comprehensive examination of the impact of stock market inefficiencies on Nigeria's GDP growth from 1990 to 2023, this research attempts to close this void.

The volatility of the Nigerian stock market is another significant issue. Even though volatility affects practically every stock economy, emerging economies like Nigeria are particularly affected. Actually, Nigeria's economic stability was severely impacted by these frequent market crashes, which ranged from the worldwide economic downturn of 2008 to the COVID-19 epidemic of 2020. Previous studies, such as Adeoye and Atanda (2021), dwell on the short-run impact of volatility on the market and are seriously lacking in depth with regard to how sustained volatility is impacting economic growth. As a result, the current study must do its part to close this gap by investigating the long-term effects of market volatility on Nigeria's economic development between 1990 and 2023.

Another grave challenge that has faced investors within the NSM is the underutilization of other investment instruments like bonds, derivatives, and mutual funds. The Nigerian financial market has become dependent on equities over these years, without giving the other instruments an opportunity to work and help spread risks toward stability. This narrow focus cuts off avenues through which the stock market provides avenues for growth in a nonfragile manner. In fact, Onwe 2023 explains that one of the significant factors which impede the scarcity of various types of loans is linked to the Nigerian stock market's success. The influence that such instruments, if introduced and properly regulated, would have on Nigeria's economic development, however, is not well established. In order to close this gap, this study attempts to explore how financial tools aid in growth in the economy.

The problem of global integration in light of the NSM remains an issue that will always be present. Since the security exchange operates insularly, it can, for that reason, never fulfill its potentials as a result of not being integrated into other financial markets globally. The non-integration with global markets should therefore not suffice to make the stock market absorb international capital flow, since such is

presumed to be very significant in economic development. Aluko and Kolapo 2020 support the notion that improved integration with the global financial market would enhance economic growth in Nigeria. However, no further analysis has been made in the paper concerning what structural changes have to be made for this to happen. This research, therefore, indicates what types of reforms would likely help integrate the Nigerian market into the global financial markets and thereby promote economic expansion..

The research objective is to ascertain whether the evolution of the economic expansion and the stock economy are causally related.

1.3 Research Questions

Thus, The following research questions will serve as a guide for the study..:

- a) What effect does Nigeria's stock market size have on the country's economic expansion?
- b) To what magnitude does impacts of stock market liquidity on long-run economic growth in Nigeria?
- c) What is the magnitude of the impact of stock market efficiency on long-run economic growth in Nigeria?

1.4 Research Objectives

This study's overall goal was to evaluate how Nigeria's economic growth is impacted by stock market development, but its particular goals will aim to:

- i. Evaluate the causality between the size of the Nigeria stock market and economic growth of Nigeria.
- ii. To evaluate the impact of stock market liquidity on the long-run economic growth of Nigeria.
- iii. Investigating the impact of stock market efficiency on the long-run economy-wide growth in Nigeria.

1.5 Research Hypothesis

The HYPOTHESIS that have been developed for this investigation in null form are:

Hypothesis 1:

H₀: Stock market size has no impact on economic growth in Nigeria

Hypothesis 2:

H₀: There is no effect of the liquidity and efficiency on the long run economic growth in Nigeria

1.6 Significance to the Study

This study's findings will serve as a tool for regulatory bodies and policymakers to use in making decisions that will improve Performance of the stock market and inflation. Investors, financial analysts, stock brokers, and others will profit from the findings of this study.

First, this will be useful for regulatory bodies in policy-making and instituting effective regulatory regimes. In this regard, regulators shall, therefore, be in a better position to understand the state of stock market development vis-à-vis economic growth for the areas of reform that shall achieve efficiency, transparency, and protection for investors in the market. This is also likely to be one of the bases for introducing measures that will make it possible to curbing market volatility, improve the integrity of markets, and foster further market participation by both foreign and domestic investors. Findings from the research would be able to point at the exact impediments that had prevented or hampered The role of the stock market in economic expansion and provide a basis upon which policies could base on factual premises.

It will be useful in practice to the policymakers, particularly in the sectors of financial and economic planning for formulating policies that promote economic expansion via the growth of the stock market. Mostly, the government of Nigeria has found it very hard to incorporate reforms in the capital markets into other broader economic policies. Therefore, this would support the empirical connection between economic expansion and stock market development, which might assist

policymakers in creating capital market-strengthening policies and connecting them to Nigeria's overarching development objectives. This will also provide an indication of the type of fiscal and monetary policies that could facilitate a stable, well-functioning stock market for sustained economic growth.

This would go a great deal in benefiting both the institutional and individual investors. Investors in their investment decisions are very dependent on correct information with substantial data, and this study will therefore avail them with an overall analysis of the Nigerian stock market's performance during the last thirty years. This research will outline market trends, risks, and opportunities and, therefore, will let investors make more informative decisions about their portfolio. It will also enable investors to understand how the development in the stock market correlates with economic growth in order to better forecast market fluctuations. In this way, it will be possible to profit from the phases of economic growth that normally come along with the improvements in the stock market.

The detailed information provided by this study will benefit the financial analysts and stockbrokers who are vital to the operations of the security exchange. The findings of this study, therefore, assist them in giving more realistic and accurate forecasts and analyses of the markets. This will help the researchers and analysts to understand the nexus that is connected with economic expansion and the market's performance, enabling them to give better advisory services to their clients in helping them make informed decisions through the complexities of the NSM. Further, it will be used for reference and comparison of various market instruments to upgrade financial models and trading strategies with better analysts and brokers.

This study is also of vital importance for other scholars and researchers. Taking into consideration the handful of studies that have specifically targeted The current study will address one of the most significant gaps in the literature by analyzing the long-term connection between Nigeria's stock market development and GDP growth. In addition to improving our knowledge of the mechanics of stock markets in developing countries, this will provide a solid empirical foundation upon which future scholars can construct. Researching some key issues, such as inefficiency and volatility of the markets and the role of financial instruments, frames the basis for further research that encompasses such issues as capital market development problems, financial integration, and economic policy.

The research would give an aggregate view of how stock market development influences the growth of economic activities in Nigeria. It is going to be of essential use for a wide range of stakeholders who shall have better information to make informed decisions. These would include decision-makers, regulators, policy makers, investors, and financial analysts. The research work further deepens the body of scholarly literature and helps future research with ease.

1.7 Definition of Terms

Stock: It refers to a claim on a portion of the assets and earnings of the company. A stockholder or shareholder has a claim on a portion of the profit in an enterprise, generally in the form of dividends, and may benefit by appreciation of the stock price.

Stock Market: This is a manifestation of markets where sale and purchase and issuance of share certificates of publicly held companies are traded. It can be both a physical-based exchange, as in the case of the Nigerian Stock Exchange, or even electronic-based exchange. It plays a vital role in developing an economy by providing a chance for firms to raise finances from the public for their expansion and equally provides an avenue for the public to invest in purchasing and selling ownership stakes in businesses, earning profits through dividends or appreciation in the stock price.

Stock Market Development: It addresses the size, flexibility, market capitalization, and financial innovation of the stock market as well as its expansion and development. In fact, the individual factors constituting it include market efficiency, regulatory framework, and investor participation.

Economic Growth: Simply said, The increase in a country's production of goods and services over a specific period of time is known as economic growth. It is often gauged by an increase in a nation's gross domestic product.

Market Efficiency: Efficiency in markets reflects to what extent the prices of stocks show all the available and relevant information. A perfectly efficient market is one that shows fair prices, with no participant enjoying undue advantages.

Capital Market: The financial market where long-term securities backed by debt or equity are exchanged is referred to by this name. It is indispensable in channeling savings into investments and hence for economic growth.

Financial Instrument: It mostly refers to an agreement that establishes a financial asset for one party and a financial liability or equity instrument for another. The most common financial instruments are stocks, bonds, and derivatives.

Volatility refers to the magnitude of deviations that any series of trading prices will exhibit over some time. It is also a measure of risk in the stock market, where high volatility normally means huge uncertainty or risk.

1.8 Organization of Study

There are five chapters in this thesis. An overview of the study is provided in Chapter One, which also includes the study's history, problem statement, research questions, aims, hypotheses, significance, terminology definitions, and organizational structure..

Literature Review reviews the existing literature on the subject on how the stock market has changed and how it affects economic expansion. It will cover both theoretical and empirical works related to the subject matter, pointing out the lacuna in the literature which this study is seeking to address.

The research design, the study population, sampling strategies, data sources, and data analysis methodologies are all covered in Chapter 3.

The results of the data collection and statistical analysis are presented in Chapter 4. Tables, charts, and statistical interpretation in accordance with the study objectives and hypothesis testing will be included.

The summary, conclusion, and suggestions are provided in Chapter 5. The study's main conclusions are outlined in this last chapter, along with some recommendations for future studies as well as investors, regulators, and legislators.

2. REVIEW OF LITERATURE

2.1 Introduction

The study's analysis of the relationship between the growth of Nigeria's economy and its stock market is the main objective of this part. It includes a conceptual framework that emphasizes the different concepts employed in this research, a theoretical framework that focuses on the primary theories employed in this study, the empirical framework which summarizes other researchers' perspectives relating to this field of study, and the research gap which aims to determine the point of research effort.

2.2 Conceptual Clarification: Concept of Stock Market

In simple terms, The stock exchange is a place where both purchasers and sellers can transact and trade assets like stocks, bonds, and shares that have a clear true worth, in order to raise long-term capital for government, business, and related parastatals' modernization and expansion projects. According to Issahaku et al. (2013), stock markets are primarily designed as a venue for the long-term capital raising necessary to address the issue of capital constraints, which is particularly significant in developing nations. Stated differently, the stock market, among other financial institutions, plays a critical role in facilitating efficient capital generation and the allocation of money for profitable endeavors. Similar to this, Baya et al. (2014) see the stock market as a central and crucial component of the financial system that facilitates the issuance of shares by businesses and creates a favorable environment in which they can trade their shares in a competitive manner.

The conversion of surplus unit savings into medium- and long-term investments in deficit unit savings is facilitated by the fluctuations of the stock exchange. There are buyers and sellers on the stock market who meet to exchange unique intrinsic commodity such as shares and bonds for the aim of raising long-term capital for the modernization and expansion of projects by companies, governments

and allied parastatals (Popoola, 2014). According to reports, it carries out vital tasks that promote capacity and job creation. Stock markets are one of the major aspects of financial system, which enable enterprises to raise capital by issuing their shares and also establish an environment in which the shares are traded (Bayar et al., 2014). The capital required for effective or efficient economic growth can also be made available through the stock market. Furthermore, because they give listed companies a platform to raise much-needed capital for their long-term investment needs, stock markets are seen as essential tools for economic growth. Additionally, this stimulates economic agents with surplus spending to save, raising the saving rate. It also directly stimulates more investments, which increases investment income for fund owners (Henry and Olabanji, 2013).

This makes it possible for companies to go public or to generate more money for growth by selling their ownership shares on a public exchange. An exchange's liquidity enables investors to sell assets quickly and easily. This is a strong argument for stock investing when contrasted with less liquid assets like real estate.. History demonstrates that the dynamics of economic activity are significantly influenced by the price of shares and other assets, which can also affect or serve as an indicator of societal mood. A rising stock market indicates that an economy is in its early stages of development. In actuality, the stock exchange is frequently thought of as the main gauge of a nation's economic health and advancement.

In essence, stocks, bonds, and mutual funds are exchanged on the capital market in Nigeria. There are several choices for investments within these categories of prospects. Such different classes of investments afford investors the opportunity to diversify their investments in line with their respective levels of risk tolerance and return expectations. This, according to Okechukwu and Adekunle (2023), is still considered the most active part of the market and is constituted of publicly traded companies such as Dangote Cement, MTN Nigeria, and Guaranty Trust Holding Company. These companies therefore utilize the equity market in sourcing funds meant for expansion; thus, the entire economy benefits. Not as deep, the bond market nonetheless offers the institutional investor an avenue for securing predictable returns. However, some of the regulatory challenges that still hinder market growth include delayed listing processes and a lack of transparency

Stock Market Performance is a signal to investors regarding their next steps, either for the stock market overall or for a particular stock. Changes in stock prices and index values can be used to predict the direction of a stock, industry, or the economy in the near future. Consequently, the performance of the stock market can be used to forecast the state of the economy as a whole.

Typically, stock market indexes provide data on the market's or a particular industry's overall performance. The health of a particular stock or the stock market as a whole is reflected in stock market performance (John, 2019). When assessing the overall performance of the index, factors such as the national income of the domestic economy, A number of factors are taken into account, including monetary concerns, security in politics, foreign relations, purchasing power equivalency (PPP), and a balanced of payments position, and the increase of the gross national product (GNP). (East Asia Forum, 2016). Bull markets are unavoidable and stock market performance is likely to be favorable if an economy is doing well. Nonetheless, it is anticipated that the stock market will perform poorly, possibly even declining if the economic performances fall short of expectations (East Asia Forum, 2016).

Several well-liked global stock market indices are used to assess stock market performance, including:

1. The Dow Jones Industrial Average (DJIA)

An index of the stock industry called the Dow Jones Industrial Average (DJIA) evaluates the performance of 30 major corporations that are listed on US stock exchanges. Despite being one of the regularly followed equity indexes, the DJIA only comprise 30 businesses and are not weighed according to market capitalization, arithmetic mean, many interested parties believe it is not an accurate depiction of The American stock market. The total cost of a single share of stock determines the index's value.of each constituent business divided by a variable that shifts each time to ensure a consistent value for the index, one of the component stocks splits or pays a dividend.

2. Automated Quotations of the National Association of Securities Dealers (NASDAQ) 100:

Consisting of One hundred of the biggest non-banking businesses that are listed on the NASDAQ Stock Exchange issuing 103 equity securities, this stock

market index measures performance. This index is adjusted capitalization-weighted. Based on market capitalization, the index's stock weights are determined, with the influence of the larger components being monitored by a set of regulations. It is not an index of US-based businesses; rather, it is based on exchange. Since financial companies were moved to a different index (NASDAQ Financial-100), it does not contain any of them. Its omission of financial companies sets it apart from the S&P 500, as does its differentiation from the Dow Jones Industrial Average based on some of the previously described criteria.

2.2.1 Measures of stock market performance

2.2.1.1 Traditional distinctiveness

Market capitalization, which represents the total value of shares listed on a stock exchange, is widely regarded as a key measure of stock market size and its influence on the broader economy. It is often viewed as closely tied to the ability to diversify risk and facilitate the movement of capital. Traditional metrics of stock market performance such as size, liquidity, and concentration are typically employed to evaluate the connection between market efficiency and economic growth....

2.2.1.2 All share index

A market's index offers a rapid means of assessing the general direction and level of development of a market. A market's index is an algebraic component that replicates the value complexity and attributes of the market. It is the weighted cost of all companies' shares on the exchange, and it is frequently used as a benchmark to assess how well different businesses and sectors are performing. This is used as an evaluation tool to determine how well the market has performed over time. This index is crucial for understanding the performance of a financial market (Maxwell, Happiness, Alice, & Chinedu, 2018).

2.2.1.3 Stock market index

Being one of the most commonly used measures of performance, the Stock Market Index has, over the years, presented a general overview of the health of the overall market through the tracking performance of selected numbers of stocks. The NGX ASI is one of the leading indices under the Nigerian Exchange Group,

comprising large extents of quoted companies across numerous sectors. The ASI reflects the change in the value of the listed stocks and thus gives a summary measure of market performance. A rising index indicates an upward general trend of the stock prices-meaning a bullish market-while a falling index indicates a bearish market (Adeniyi & Okechukwu, 2022). It also has its sectoral indices, which include the NGX Banking Index and NGX Consumer Goods Index. These provide a better focus on the performance within the different industries that form the sectors.

2.2.1.4 Trading volume

Because it shows how many shares are traded in a specific time frame, the trading volume describes the stock market's liquidity. High volume means that investors are in better activities and it is usually linked to a healthy and liquid market. The low trading volumes are indicative of the investors' interests or illiquidity in any market, where serious difficulties are faced by investors in trying to purchase or sell shares without having excessively consequential price movements. According to Adewale and Osagie (2023), the Nigerian Exchange has grossly been influenced by macroeconomic variables like inflation and volatility in the exchange rate, which affect investor sentiments in terms of participation in the market. The increased trading activity in the last couple of years is thus partly due to the accessibility of markets through the adoption of an electronic platform for trading by retail investors.

2.2.1.5 Price-to-earnings ratio

Another important tool for performance indication in the stock market is the price-to-earnings ratio. In order to ascertain whether a company's stock is overvalued or undervalued, the market price of the stock is compared to its earnings per share (EPS). A high P/E ratio would indicate that investors expect very strong growth in the future. A low P/E ratio may indicate undervaluation of the stock or that the firm is experiencing serious financial problems. In Nigeria, the state of the economy dealing with issues such as high inflation and currency depreciation-has made corporate earnings tight, consequently influencing the P/E ratios of listed companies (Olowe & Ibrahim, 2023). The investors mostly use the P/E ratio in unearthing the seemingly undervalued stocks for potential investment opportunities. This can be the case with

emerging markets, which, like Nigeria, are always associated with informational inefficiencies that result in mispricing.

2.2.1.6 Nigeria stock market

Established in 1960, the Nigerian Stock Industry (NSE) was once known as the Lagos Stock Market. The Securities Exchange of Lagos was replaced with the Nigerian Stock Exchange in 1977. It had 169 listed businesses as of May 31, 2018, and its combined market capitalization exceeded ₦13 trillion. As of July 2019, the overall market capitalization increased to ₦14 trillion. NSE Premium, NSE 30, and NSE 50 are stock market indexes in addition to the NSE All Share Index (Nigeria Stock Exchange, 2019). The NSE serves the continent's largest economy and promotes the growth of Africa's financial markets.. In addition to listing and trading services, the exchange provides market data solutions, licensing services, ancillary technology services, and more (SEC, 2019).

Since April 27, 1999, The Automated Trading System (ATS) used by the Nigerian Stock Exchange allows dealers to do business via a server-connected network of PCs. Features for remote trading and surveillance are available through the ATS. As a result, a large number of dealing members trade online from their thirteen locations nationwide as well as from their offices in Lagos. More branches of the Exchange are being opened for online real-time trading. Every working day, at 9.30 a.m., trading on The Exchange ends at 2.30 p.m. (Nigeria Stock Exchange, 2019).

In 1993, the Nigerian Capital Market underwent deregulation. As a result, stockbrokers alone set prices on the secondary market, whereas issuing houses and stockbrokers determine pricing for new issues.

2.2.1.7 The roles of Nigerian capital market

Through the capital market, financial resources can be combined and made available for successful business endeavors. Without an effective financial market, the majority of profitable projects that implement developmental objectives might go unutilized. Due to its ability to link the monetary and real sectors, the capital market promotes growth in the latter and raises citizens' standards of living (Okoro, 2012).

According to Oke (2012), the capital market offers a venue for the pooling and distribution of financial resources to profitable endeavors. According to Briggs' (2015) research, the capital market is still a major force in every economy and can influence economic progress, thus organized private sectors need to invest in it.. It is the long-term capital market. In reality, the capital market is where people and organizations that require long-term funding will go. The capital market's structure enables owners of extra long-term wealth to provide long-term funding to those in need.

The Nigerian capital market is a vital component of the country's economy, as it allows companies to raise capital through the issuance of securities such as equities and bonds (Oyewole & Abayomi, 2019). The Nigerian Capital Market is an essential component of Nigeria's economy because it serves as a marketplace through which companies can raise funds for investment and expansion, and it also serves as a channel for investors to amass wealth. According to Oduh (2020), the NSE is the principal exchange in the capital market of Nigeria, with over 200 listed companies as identified by Osho & Olofin (2015).

Theoretically, capital markets can promote economic growth by increasing the volume of investment volume and output (Kaserer and Rapp, 2014; Pan and Mishra, 2018). The capital market is a system of specialized financial institutions together with a variety of processes, methods, and supporting infrastructure to let suppliers and users of medium- to long-term capital for use in economic development projects meet (Rodrigue, 2020). It is simply a structure or procedure for selling and buying financial assets with similar maturities in order to provide the institutional capital required to maintain medium- to long-term real sector activity. By providing assets with the appealing yields, liquidity, and risk characteristics that governments and other financial institutions desire, the capital market promotes financial savings which it need in order to obtain long-term financing, according to Laeven (2014).

Capital markets facilitate the transfer of people's surplus funds to organizations for use in profitable business operations (Viral, 2019). With market capitalization to GDP ratios well above 90%, capital markets are the main source of funding in a number of economies, including the US, UK, and Southeast Asia (African Development Bank, 2019). Capital Market is a market where long-term

funds and securities whose tenure extends beyond one year are taken place (Esian & Ebipre, 2020). In addition, the capital market include debentures, federal government bonds, common shares, preference stocks, mortgage bonds, long-term loans, and industrial loans. In other words, investors, governments, businesses, and private individuals can use the capital market to obtain both short-term and future funds, which is a complicated system and organization.

The Nigerian financial market operates under the supervision of the Securities and Exchange Commission (SEC) and the Central Bank of Nigeria (CBN). It comprises the Nigerian Stock Exchange, which facilitates securities trading, and the Financial Market Infrastructure Group Warehouse. In contrast, the NSE is a public limited liability company., FMDQ is a securities exchange and SRO permitted by the Commission to provide a platform for listing, quotation, registration, and trading of securities. Fundraising, liquidity generation, risk diversification, better information gathering and distribution, and increased interest in corporate governance are just a few of the capital market's many important roles. Enhancing these functions' efficacy and efficiency through timely service delivery can accelerate economic growth (Yadirichukwu & Chigbu, 2014).

The capital market, according to Ubesie, Nwanekpe, and Ejilibe (2020), is primarily a market for securities with long-term implications, including stocks, bonds, and debentures, whose average maturities are greater than three years. In order to build the link between financial development and economic advancement, a capital market must be able to convert savings into investments (Hossain, 2020). A marketplace where stocks are traded, the capital market is also known as a stock market and offers a way to mobilize savings for long-term investments (Grbic, 2020). The capital market is the market where medium- and long-term financing is purchased and sold (Umar, 2022).

Securities backed by equity or long-term debt (lasting more than a year) are bought and sold in the capital market, a financial marketplace (Ikeobi, 2020; O'Sullivan & Sheffrin, 2003). Through middlemen, the capital market links investments and savings between capital providers and capital users (Didier et al., 2021). According to Abayomi and Yakubu (2022) and Omimakinde and Otite (2022), the capital markets are a network of specialized financial institutions and a collection of infrastructure, procedures, and mechanisms that make it easier for long-term

capital providers and consumers to connect. Abayomi and Yakubu (2022) and Ayeni and Fanibuyan (2022) added that it is evident that capital markets are important because they allow for the expansion of the real sector by providing producers of goods and services as well as organizations responsible for developing infrastructure with access to long-term financing. The volume of transactions or volume of stocks traded represents the volume of stocks traded within a time frame on the Nigerian Stock Exchange trading floor; a large volume indicates additional trading activities on the exchange's floor (Emmanuel & Elizabeth, 2020). Adereti and Mayowa (2021) claim that the capital market acts as a bridge between the monetary sector and the real sector of the economy, which is involved in the production of goods. The total value of domestic stock transactions or trades serves as another measure of capital market liquidity (Grbic, 2020). Value of transactions indicates the total value of stocks transacted as well as the capital market's liquidity (Ibrahim & Mohammed, 2020).

The Nigerian economy depends heavily on the capital market (Iortyer & Maji, 2022; Iyaji & Onotaniyohwo, 2021). The Nigerian capital market has grown recently, according to data from the Central Bank of Nigeria (CBN) (CBN, 2020). This increase is mostly due to the Federal Government's economic reform initiatives in the areas of bank and insurance firm consolidation, privatization, pension reform, and mortgage, as well as increased investor awareness, market confidence, and generally stable political conditions (CBN, 2020). For example, from 5,672.7 points in 1998 to 24,085.8, 28,078.81, and 42,716.44 points in December 2005, 2012, and 2021, respectively, the all-share index has increased gradually (CBN, 2021). Thus, from N262.5 billion in 1998 to N7,764.5 billion as of April 30, 2007, and N26.76 trillion in the first quarter of 2022, the overall market capitalization has grown significantly (CBN, 2021).

2.2.2 Conceptual clarification: economic growth

Economic growth refers to the annual increase in a nation's Gross Domestic Product (GDP) or Gross National Product (GNP), representing a prolonged period of sustained growth in national output or per capita production. Adeneye (2022) describes economic growth as the steady and positive rise in the total production of goods and services within an economy over a specified timeframe. It occurs when an

economy enhances its capacity to produce goods and services consistently over time. Similarly, Ubesie, Nwanekpe, and Ejilibe (2020) define economic growth as the gradual accumulation of a nation's wealth. It can also be understood as an increase in per capita GDP or other income indicators, typically measured as the annual percentage change in real GDP. The primary driver of economic growth is improved productivity, which entails generating more goods and services with the same level of labor, resources, energy, and capital.

There are two ways to look at economic growth: either the overall rise in the income of people in a nation or the potential rise in the income of people who make up the working class in a nation based on the population's kind and educational attainment (Kingsley and Toyosi, 2018). Since it also refers to a gain in production over a typically stated period of time, many nations use real GDP that is, GDP calculated by subtracting the impacts of inflation to aim for positive economic growth on a quarterly basis (Ibrahim and Mohammed, 2020). To determine the rate of growth or growth rates, the economic growth of economies is typically calculated using real GDP (Grbic, 2020). A rise in the proportion of Real GDP or inflation-adjusted terms to offset inflationary pressures on prices of goods and services is the measure of economic growth (Okonkwo et al., 2015). Real GDP is used by economies to calculate growth rates and ascertain their rate of expansion (Grbic, 2020). According to Dynan & Sheiner (2018), it is measured as the rate of growth in real GDP as a percentage, typically expressed in terms of per capita

Economic growth is defined as a rise in the production of goods and services during a specific time period. For the measurement to be accurate, inflationary effects must be taken into consideration (Michael and Rufaro, 2020). The steady rise in an economy's ability to manufacture goods and services is a second definition of economic growth. Nominal or real terms, which are inflated and modified, can be used to express it. Overall economic growth is generally measured using the Gross National Product (GNP) or Gross Domestic Product (GDP), while other metrics are occasionally used as well (Abdullah et al. 2022). The GDP is the most reliable indicator of economic growth. This is due to the fact that it is the origin of all economic output in the nation. All products and services produced for export by the nation's companies are included. Whether they are sold domestically or elsewhere has no bearing. GDP is a metric used to quantify output. It does not include the

elements that go into making a product. . Exports are included as they're produced locally. Economic growth is import-adjusted. Most countries evaluate their economic growth every three months. There is no more trustworthy measure of growth than real GDP.

2.2.3 Stock market and economic growth in Nigeria

The stock market is crucial to the evolution of any nation's financial system and provides a means of funding initiatives and investments that can boost employment, lower poverty, and spur economic expansion (Musa & Ibrahim, 2014). The stock market gives investors the capacity to easily profit from investments by directing financial resources toward those elements that yield higher profits in order to promote economic growth; and Economic expansion is a rise in the ability of an economy to produce. It suggests a continuous rise in the level of output because of the parameters that were used to creation. All of the nation's savings are directed toward the most appealing investments in order to promote economic growth and development, and the stock market facilitates communication between savers and investors in an open market (Popoola, Ejemeyovwi, Alege, Adu & Onabote, 2017).

In general, An important factor influencing economic growth is the stock market. since the mobilization of savings can be effectuated through it, and an avenue is provided to invest in businesses and government projects. Since the commencement of a stock market in Nigeria in 1960 with the formation of the Lagos Stock Exchange, currently known as the Nigerian Exchange Group, such a market has seen considerable changes in the country. The development has, therefore, been influenced by the internal and external economic factors, and as such, the stock market has become the impetus of economic activities. As Okoro et al. (2022) posited, the Nigerian stock market is a medium that provides avenue for companies and the government to source capital by selling shares and bonds to the general public to boost investment and economic growth. Nevertheless, volatility, regulatory constraints, and macroeconomic instability have challenged these.

Recent empirical studies on how the Nigerian stock market affects economic expansion have presented inconclusive results. For instance, a study by Angaye & Frank, 2020 within the period between 2003 and 2022 shown a favorable correlation between GDP growth and stock market development, but the influence was

insignificant. A similar study by Ona et al. (2017) focusing on data between the years 1986 and 2010 found that even though there is a significant contribution of the stock market to economic performance, its role is often underestimated due to the dominance by other economic factors such as government policy and external economic circumstances.



3. LITERATURE REVIEW

3.1 Introduction

The Nigerian stock market over the past couple of decades has been fully transformed; it has turned into an indispensable part of the financial system in the country. It is believed to affect the economic growth of the country as it gives scope for capital formation and allocation of resources. It also refers to the change in investor confidence. The degree and nature are disputed, and this calls for critical study. It is separated into four parts: a theoretical review section that discusses some basic theories supporting theories including efficient market theory, contemporary portfolio theory, neoclassical growth theory, and endogenous growth theory that relate economic growth and stock market development. Each has contributed in a different way to the explanation of how stock markets might influence economic outcomes.

Therefore, the empirical literature review summarizes how previous studies have investigated how changes in the stock market affect economic expansion, both globally and in the case of Nigeria. It outlines methods used, findings, and contexts within which such research was conducted and provides a critical review of the existing body of knowledge.

The section on the review of methodologies presents various methodological approaches that have been adopted in literature with regard to investigating this relationship. It appraises the strengths and weaknesses of different research designs, data sources, and analytical techniques that form the basis for the methodological choices made in the current study. Finally, the literature gap section highlights what has not been covered in the literature and states the contributions of this study. Filling these gaps, therefore, this research tries to develop a more subtle comprehension of how The status of the stock market has an impact on Nigeria's economic growth.. This is important as it helps in the formulation of informed policy recommendations.

3.2 Theoretical Overview

The theoretical review thus provides a sound intellectual basis and structured framework within This establishes the intricate connection between stock market development and economic growth. To this end, this section reviews some of the well-established economic theories and models that describe how the stock market functions and relates to economic performance.

3.2.1 Efficient market theory

According to Rişan (2015), the Efficient Market Hypothesis has its roots in the 1960s, when the academic world started believing that the capital market was efficient, with the pioneering contributions of Eugene F. Fama and Paul A. Samuelson in 1965.. Later, the Efficient Market Hypothesis (EMH) was evaluated and its underlying ideas were stated by Fama (1970). According to the marginal efficiency hypothesis, a set of decision rules for businesses will be produced by comparing the marginal efficiency of investments to the market rate of interest. The proper rule is either $MEI < r$, which rejects an investment proposal, or $MEI \geq r$, which accepts one. The rule goes on to define r as the market rate of interest and says that an investment is at its optimal or equilibrium level when $MEI = r$. According to EMH, stock prices already take into account all of the market's information. EMH generally holds that the stock price already has information that could be utilized to forecast stock performance. The weak, semi-strong, and strong forms of hypothesis are the three variations of the EMH. There are three separate meanings associated with these three variants.

a) Weak Form Efficient Market Hypothesis

The weak form of the EMH states that stock prices already account for all available historical data from market data (by looking at previous prices and volume figures). In other words, investors would be able to consistently outperform the market if technical analysis tools failed to identify any trends or patterns that could be useful in forecasting future price movements (Jordan et al., 2018). The argument that stock prices need to follow a random walk, according to Bodie et al. (2021), is predicated on the idea that stock values that fluctuate in response to erratic information ought to do so in an unexpected manner. Price movements that are random walk indicate that the trading data does not include the knowledge needed to

forecast future price movements. Any knowledge that might be used to forecast future performance would already be in the hands of every investor, making historical trading data meaningless (Kumar, 2016). While technical analysis is not useful for forecasting future price movement in a weakly efficient market, other strategies (like the fundamental analysis technique) can still be able to create additional profits.

b) Semi-Strong Form Efficient Market Hypothesis

Fama (1970) observed that after extensive evidence supported the efficiency hypothesis at the weak form level, attention shifted towards examining the semi-strong form of the Efficient Market Hypothesis (EMH). At this level, the focus is on how quickly market prices adjust to newly available public information, such as financial statements, dividend declarations, or new security issuances. The semi-strong form of EMH posits that current market prices incorporate all publicly accessible information. This includes historical price trends, trading volumes, and critical details about the company, such as its product offerings, balance sheet structure, accounting practices, and the quality of its management (Oseni & Nwosa, 2011).

c) Strong Form Efficient Market Hypothesis

The strong form degree of market efficiency is the ultimate and third form of the EMH. According to theory, the price already takes into account all pertinent information, including current, historical, and confidential information that is only known by corporate insiders. The market must also be semi-strong and weak form efficient if it is at the strong form efficiency level (Kumar, 2016). According to Fama (1970), the primary focus of strong form market efficiency is whether all relevant information is reflected in a way that precludes any one person from achieving larger predicted profits. Even insider knowledge wouldn't be sufficient at this point to generate an excessive return.

The manner that investors respond to fresh information is a major critique of the Efficient Market Hypothesis (EMH). This hypothesis is predicated on the notion that financial investors are completely rational. It is clear that this theoretical approach disregards financial investors' overreactions and underreactions, specifically the irrationality of their investment activity.

The importance of EMT can be gauged within the fundamental role it has played in modern financial theory, besides a number of investment strategy modifications which arise as a consequence of such a theory. It reinforces the concept of futile active portfolio management; market prices cannot be foretold, and the pattern of market prices is no more predictable than a random walk.

However, the theory has faced considerable criticism most especially from the field of behavioral finance. The critics, on the other hand, would say that it assumes EMT is a rational behavior and has failed to consider the psychological component that may create anomalies and inefficiencies in the market. Empirical evidence has also revealed numerous cases where the market is not able to reflect all available information, which again goes against the strong form of EMT ((LOREDANA, 2019)

3.2.2 Modern portfolio theory

In his 1952 paper "Portfolio Selection," which was printed in the Journal of Finance, Harry Markowitz elaborated on this idea. Depending on the degree of market risk, risk-averse investors might build portfolios to optimize or maximize projected return thanks to modern portfolio theory (MPT), which emphasizes that risk is a necessary component of higher reward and finds a "efficient frontier" of optimal portfolios that offer the best expected return for a given level of risk. According to contemporary portfolio theory, each investment's risk and return characteristics should be assessed in relation to how they impact the risk and return of the entire portfolio, rather than separately. MPT makes the assumption that investors are risk adverse, meaning that they would choose a lower risk portfolio to a greater one for a given rate of return. This implies that an investor will only increase their risk if they expect to receive higher returns. The anticipated return of the portfolio is derived using the weighted sum of the returns of the different assets.

The optimal portfolio, according to MPT, is one that either minimizes risk for a given level of returns or maximizes returns for a given level of risk. This is accomplished by choosing a group of assets that, at a given degree of risk, offer the best projected return. According to the idea, investors are risk-averse and rational, which means they would rather take on less risk in exchange for a higher rate of return (Fabozzi, Gupta & Markowitz, 2002). The value of the investor's investments

will not change if he chooses to invest in two commodities with the same risk of return (Ferreira et al., 2019). According to the portfolio theory, banks' efficiency and profitability will increase with a well-diversified portfolio.

MPT has been extensively tested in empirical studies, with mixed results. Some studies have found that MPT provides a useful framework for understanding investment decisions, while others have found that the theory does not fully capture the complexity of real-world markets. Despite these limitations, MPT remains a foundational theory in finance and continues to shape investment strategies today

3.2.3 Neoclassical growth theory of Solow

In 1956, Robert Solow, along with Trevor Swan, developed what has now come to be generally called the Solow-Swan model as one of the basic models for understanding economic growth in the long run. What has come to be popularly called the Solow Growth Model was designed to investigate determinants of economic growth, especially capital accumulation, labor growth, and technological progress (Solow 1956). This hypothesis was advanced forthwith as a necessary antithesis to the Keynesian growth models. It emphasized the contribution of capital accumulation, growth of labor, and technological change in the long-term growth of an economy. The Solow model changed the face of growth dynamics and indicated amply that while capital and labor are the crucial inputs, it is technological progress that acts as the actual force behind sustained economic growth. This model gave a lead to the further theories of economics and stood at the core of macroeconomic policy debate over the last decades.

One of the most influential economists, Robert Solow, put forward the Neoclassical Growth Theory in 1956. This theory postulates that while capital and labor are sources of economic growth, their marginal productivities are diminishing; thus, without perpetual technological change, economic growth cannot persist. Indeed, over time, the Solow model has been one of the most surviving models in growth economics, widely applied and transformed in many ways when exploring the growth processes of different economies.

The neoclassical theory of growth finds applications in the rather practical areas of policymaking, especially in assessing what is needed to make development sustainable. To this end, it has provided insight into why capital-led strategies for

growth do not work beyond a certain limit. Indeed, Solow's model stresses the fact that the growth that is led purely by the increase in capital cannot be sustained and that at some point, technological changes become quite imperative if stagnation is to be avoided. This theory, therefore, in countries that are aiming at long-run economic growth, emphasizes the need to keep on developing through research and development so as to raise productivity. The model is also applied in various sectors to calculate the kind of growth that will be attained from the changes of labor force and capital investment. Critics argue that such a model overly simplifies the very nature of technological change, by making it an exogenous factor, rather than examining it as an intrinsic element of economic systems. It is for this reason that the assumption has given way to development in the idea of endogenous growth theories which try to incorporate technology within a growth model. Besides, the Solow model does not integrate institutional quality, human capital, and structural inequalities of economies-each of which plays an important role in economic development-and is hence inapplicable to real-world situations. According to Acemoglu (2020), this too creates a limitation to applicability.

This theory is especially applicable for the basis of this study, as it addresses how capital and technological advancement function within the context of the economy of Nigeria. In this respect, the analysis of the stock market's evolution and how it affects economic expansion is informed by the Solow model in indicating that accumulation of capital in financial sectors may impact the expansion of the economy while pointing to the limits of growth due to capital alone without accompanying technological advancement. The present study, therefore, tries to lean on Solow's framework in an attempt to look into the importance of the Nigerian stock market to capital allocation for achieving sustained economic growth, mindful of innovation and institutional development as key to sustainability in economic growth.

Recent studies have applied the Neoclassical Growth Theory to evaluate the state of economic growth within emerging markets-a fact that argues for its relevance despite criticisms. For example, Odhiambo (2022) integrates Solow's model into analyzing how capital accumulation and technological change drive economic growth in Sub-Saharan African countries. This is found to establish a conclusion that technological investments are very cardinal in bridging gaps in economies. Similarly,

some studies on economic growth in Nigeria have, through the model, indicated various ways through which stock market activities relate to national output and productivity growth. These applications also underline the fact that among the host of models which have sought to explain growth, it is Solow's model that has most remarkably shown persistence in modern economic research, especially in developing economies where capital and technological change are the major drivers of growth.

3.2.4 Endogenous growth theory

According to the economic theory known as endogenous growth theory, economic growth is ultimately brought about by internal processes within a system. The endogenous growth hypothesis provides a fresh viewpoint on the variables affecting economic growth by contending that internal elements such as investment capital, human capital, and innovation, as opposed to external, uncontrollable causes, determine a constant rate of prosperity. More specifically, the hypothesis states that the development of new technologies and efficient, economical manufacturing techniques will occur as a nation's human capital improves. This hypothesis challenged the notion of neoclassical economics. Economists contend that faster innovation, higher human capital investments, and internal development can all directly boost productivity. Consequently, they back public and private organizations that encourage innovation initiatives and offer financial support for research and development as well as intellectual property rights to encourage individuals and businesses to be more inventive.

It assumes that investment in knowledge and human capital, with appropriate complementary institutions and policy frameworks, are the mainspring of long-term growth. Building on the work of earlier economists like Robert Lucas and Kenneth Arrow, Romer demonstrated that productivity and innovation could continue to prop growth without the diminishing returns posited by neoclassical growth theory. The theory of endogenous growth does find broad applications within the realms of understanding economic progress through investments in human capital, innovation, and R&D. In this respect, policymakers in emerging economies have utilised this theory to gauge the value of investment in education, research institutions, and technology infrastructure towards long-run development. For instance, a handful of

studies in African economies have adopted this theory in understanding how knowledge-based investments have the potential to transform sectors such as manufacturing, ICT, and agriculture. Using these insights, policymakers could foster environments that are helpful to the creation of an innovative and entrepreneurial atmosphere because such a setting can create sustainable economic growth. In fact, this view has been supported by various works of (Aghion & Howitt, 1998); (Romer, 1994).

Despite its strengths, however, there are also some important criticisms of the Endogenous Growth Theory. The theory is seen by some to place too much emphasis on knowledge and innovation, simultaneously downplaying the role of all other factors that influence economic development trajectories of countries or regions, including social dynamics, political dynamics, and cultural dynamics. Knowledge investment and innovative activity are assumed within the theory necessarily to translate into growth, with an evident disregard for market failure and the more limited absorptive capacity of developing countries. This model, however has also received some criticism from scholars on grounds of being too idealistic and lacking empirical strength as this model presumes constant returns to investment in knowledge-a thing that may not hold in every situation encountered in real life. Other scholars include Jones, 1995; Mankiw, Romer & Weil, 1992. Given the aforementioned idea, it explained how, in line with the Endogenous Growth Theory, the evolution of the stock market influences Nigeria's economic growth. According to the new growth theory, a thriving stock market can foster innovation and entrepreneurship by improving access to capital, which enables businesses to make investments in R&D and human resources.. A developing stock market in Nigeria may be able to trigger growth by stimulating more investment into the productive sectors and reducing costs of capital. The stock market promotes funding to innovation and, therefore, enhances productivity, which is regarded as vital for endogenous growth.

The study has been carried out in work such as that by Okafor and Ezeaku (2020) and Al-Faki (2022), indicating that financial development through the use of stock markets is one area of significant contribution toward moving the Nigerian economy on a higher growth trajectory, evidence that supports Romer's theory in the context of Nigeria. Many scholars have used Endogenous Growth Theory in attempts

to conduct reviews regarding economic growth in emerging markets with respect to the development of financial markets. In fact, the theory has been used to outline how financial liberalization affects economic growth, as viewed in Okafor and Ezeaku (2020), and it also illustrates the positive way it impacts innovation and capital accumulation in sub-Saharan Africa. On the other hand, Adusei (2019) has also used the theory to establish exactly through what ways investing in human capital contributes to development in developing countries. These current studies underline how the Endangered Growth Theory explains the relation between financial markets and long-term growth, as the ideas of Romer on innovation and knowledge capital are continuously updated through research in developing economies.

The more recent growth theory, known as the endogenous hypothesis, has significant policy implications and fits the real world flawlessly. This is due to the fact that it links efficiency and savings as the two primary drivers of output growth per capita. In other words, growth is driven by both the accumulation of factors and the efforts made to use them. Reaching economic stability with low inflation and a positive (real) interest rate that encourages saving, which is beneficial for growth, is a significant economic policy implication of this way of thinking. Contessi, 2009. According to endogenous or modern growth theory, investors and business owners can engage in creative endeavors through financial intermediaries and security markets, which influences economic growth.

3.3 Empirical Review

Adebisi and Adewuyi (2022) have attempted to examine how changes in the stock market affect Nigeria's economic expansion. Choosing 100 Nigerian publicly listed companies as the population, secondary data was obtained from various annual reports of the Nigerian Stock Exchange. Results shows using econometric modeling and regression analysis that a significant association exists between stock price indices and trading volume with GDP growth, which eventually underlines the fact that a stable stock market maintains economic stability. They, however, thus advocated for policies that would improve regulatory oversight to ensure that this stability was maintained.

Using a sample of 50 publicly traded firms, Otekunrin and Olayemi (2023) examined the relationship between economic development and stock market evolution during a ten-year period, from 2013 to 2023. The Autoregressive Distributed Lag (ARDL) method was applied to examine time-series data sourced from the Central Bank of Nigeria and the Nigerian Stock Exchange. The findings indicated that enhancing market liquidity through public-private partnerships had a positive and significant effect on GDP growth..

Aliyu and Ibrahim (2020) evaluated the performance of the stock market in relation to sectoral contributions to Nigeria's economic growth utilizing information from 80 businesses in a range of sectors. Vector Error Correction Model using sector-specific impact was applied by using a combination of secondary sources from industry reports and annual financial records. The findings were that finance and manufacturing sectors have the maximum impact on GDP growth. They suggested that the sectors needed to be strengthened through better access to investment and upgrade of technology.

Umar and Yusuf (2021) examined how financial intermediation enhances the performance of the stock market in Nigeria through a sample of data from the Nigerian Stock Exchange and a sample selection of 70 financial institutions. Data were derived from the financial reports of these institutions and analyzed using Granger causality methods. The findings demonstrated that sound financial intermediation improved the growth of the stock market, hence providing a boost to GDP. They suggested ease of access to credit for market expansion.

Samuel and Akinlo (2019) conducted a study on the causal relationship between stock market parameters and GDP by sampling a total of 60 firms over a period of 15 years from 2005 to 2019. Data was obtained from NSE records and subjected to Granger causality testing. The findings demonstrated a direct positive correlation between market capitalization and GDP growth. Recommendations indicates that improvement in the infrastructure of the market to make it inviting for new investors.

A study on market efficiency as a catalyst for economic expansion was carried out by Adekunle and Ojo. Fifty companies that are listed on the Nigerian Stock Exchange make up the sample size. The Nigerian Stock Exchange provided

the data, which was examined using a methodology for market efficiency study. The study concluded that an efficient market contributed more to economic performance by improving capital flow and recommending that trade regulations be reviewed in order to increase efficiency

Odhiambo (2022) evaluated capital accumulation and technological innovation in the economy of Nigeria by randomly selecting 100 companies from technology and manufacturing sectors. Annual reports were considered secondary data for collection, and further analysis was done using the cointegration model. The results showed that capital formation and technological innovation are the significant causes of economic growth, and therefore technology-driven initiatives must be pursued further within the stock market.

Akinola and Fakunmoju (2016) investigated stock market development, savings, and economic growth using a sample size of 60 firms from different sectors. Structural Equation Modeling was applied to analyze the data collected from annual reports. The findings showed that stock market development promotes savings; savings thus facilitate investment to bring about growth. Recommendations suggested promoting savings through financial instruments friendly to the market.

Omotayo and Olatunde (2018) examined the effect of securities market reforms on the economic growth of Nigeria, using a sample of 80 listed companies. Panel data was obtained from various regulatory and market reports and used regression analysis in determining the effect of the reforms. Results shows that reforms in transparency have positively impacted economic growth and concluded that they must be updated consistently.

Okon and Joseph (2018) estimated the effect of volatility in the stock market on economic growth by using a sample size of 70 firms. Data were gathered on stock prices from the NSE and subsequently applied GARCH modeling on the obtained data. The results indicated that volatility in the market discouraged investors; therefore, advocating for stability measures within the markets to attract more investors.

Ajayi and Olufemi (2016) conducted a time-series analysis between the long-run stock market growth and GDP growth using data of 65 companies for a period of two decades. The secondary data thus obtained was analyzed based on cointegration

models to observe that a growing stock market is positively related to GDP growth. Recommendations suggest that steps to ensure sustained public awareness and participation in the market.

Adamu and Garba (2018), on the other hand, sampled 75 companies to study the use of time-series data to examine the connection between economic growth and stock market development and analyzed through econometric modeling. According to the results, growth in the stock market supports savings and investment. In their recommendations, they included increasing investor confidence through education programs.

Ibrahim and Adewale (2017) examined the role that stock market growth plays in economic diversification based on a sample size of 60 companies. The sectoral data were obtained from the records of the stock exchange and subjected to a sectoral growth model. Findings indicated that economic diversity is supported by stock market expansion, and as such, prescribed incentives to be given for sectoral growth in different industries.

Ogundipe and Fadeyi (2017) explored how stock market performance influences GDP growth. Data were collected from 80 companies listed on the stock exchange over a ten-year period. Reports from the Nigerian Stock Exchange (NSE) served as the primary data source, and the analysis was conducted using Ordinary Least Squares (OLS) regression. The results revealed that stock returns had a positive effect on GDP growth. The study emphasized the importance of implementing financial literacy programs to encourage greater participation in the stock market.

Using market capitalization and turnover ratios as indicators of stock market performance and GDP as a measure of economic growth, time-series data from 1981 to 2015 were analyzed with the Autoregressive Distributed Lag (ARDL) technique and the Granger Causality model. Similarly, Osakure and Ananwud (2017) assessed the relationship between stock market growth and economic development, identifying a weak but positive link between economic growth and the stock market's performance in both the short and long term..

To determine if stock market expansion leads to economic growth in Ghana, Nabieu and Barnor (2016) use Granger causality and the Vector Error Correction Model (VECM) on time series data from 2000 to 2012. Their method concurrently

determines the relationship between the development of the stock market and the growth of the economy, unlike alternative methods that failed to identify the direction of influence in this relationship. The causality test results indicate a relationship between Ghana's capital market expansion and economic growth., which show a bidirectional correlation between the two variables.

Okonkwo et al. (2014) analyzed the role and contributions of the Nigerian stock market to economic growth using the Johansen cointegration test. Drawing on data from 1981 to 2012, the study identified long-term equilibrium relationships among the variables through this methodology. The findings revealed that the size of the stock market significantly influences economic growth and serves as a strong predictor of its trajectory. However, the analysis did not establish a causal relationship between economic progress and stock market capitalization, supporting the no-feedback hypothesis.

Asamoah (2018) explored the relationship between the Ghana stock market and economic growth using monthly time-series data spanning 2000 to 2012. The study employed Granger Causality Models and Vector Error Correction Models (VECM) to analyze the data. The results demonstrated a bidirectional causal relationship between economic growth and stock market development, indicating that the Ghana Stock Exchange impacts economic growth in both the short and long term. These findings, along with similar studies, support the feedback theory, which posits that advancements in the financial sector drive economic growth, while economic expansion enhances financial sector performance.

Abdullahi and Fakunmoju (2019) examined the connection between stock market growth and economic performance in West African countries. Using secondary data and panel regression analysis over a seven-year period across selected nations in the region, the study found that stock market indicators—such as the market capitalization-to-GDP ratio, the all-share index, and stock turnover—positively influenced economic performance. In contrast, the corruption perception index negatively affected economic performance at a 5% significance level. These findings highlight the role of stock market growth in driving economic activity and fostering regional development.

Ofori-Abebrese et al. (2016) analyzed the relationship between Ghana's stock exchange and its economic growth from 1991 to 2011 using the Granger causality test alongside the ARDL model. The study concluded that stock market development had a long-term adverse impact on economic growth, as the causality test revealed no significant relationship between economic growth and stock market expansion during the study period.

In the Nigerian context, the Granger causality test suggested a correlation between stock market development and long-term economic growth, though no causal link was identified in the reverse direction. Echekeba et al. (2016) explored both the short- and long-term dynamics of the causal relationship between economic growth and stock market development from 1981 to 2015. The study used stock market capitalization and stock traded ratios as indicators of stock market development, while GDP growth rate was employed as a measure of economic growth. Olukemi and Uche (2022) studied how access to the market influences the economy, taking data from 70 selected companies in Nigeria. The annual financial reports obtained were analyzed using DEA, showing increased access has a positive impact on GDP. Recommendations suggested how the digital access of the stock market could be improved.

Adebayo and Eke (2023) analyzed the relationship between GDP and stock market investments in Nigeria using a sample of 85 businesses. Their study relied on secondary market data, revealing that increased participation in the stock market significantly enhances economic growth. The study recommended fostering regulatory policies that include small-scale investors as a means to further promote economic development.

Oriaregbete (2019) examined the connection between economic growth and stock market performance in Nigeria. GDP was used as a proxy for economic growth, while market capitalization (MCP), value of new shares (VNS), and the all-share index (ASI) represented stock market activity. The analysis employed regression models, cointegration error correction models, stationarity tests, and Granger causality tests. The results showed that while ASI and GDP had a positive but statistically insignificant relationship, MCP and GDP exhibited a strong and positive correlation. The cointegration analysis confirmed a stable long-term relationship between economic growth and stock market activity. Furthermore, the

Granger causality test identified a unidirectional causal relationship from GDP to both MCP and VNS. The study concluded that Nigeria's stock market plays a vital role in economic growth and recommended enhancing stock market operations while educating the public about new investment opportunities to encourage broader participation.

3.4 Methodological Review

Ofori-Abebrese et al. (2016) utilized Granger causality tests and the ARDL model to evaluate the long-term causal effects of stock market development on economic growth in Ghana from 1991 to 2011. Their results revealed that, unexpectedly, stock market development negatively affected economic growth, and no evidence of a causal relationship between the two variables was found during the study period. The relationship between stock market development and economic growth has been explored using various methods across different African economies.

Similarly, Echekeba et al. (2016) investigated the development of Nigeria's stock market from 1981 to 2015, focusing on indicators such as stock market capitalization and the value of stock traded ratio. Their analysis, which incorporated Granger causality and cointegration tests, aligned with the findings of Ofori-Abebrese et al. It showed no short-term causal link between economic growth and stock market development but confirmed the existence of a long-term relationship between the two variables..

Other evidence regarding the relationships of causality was given by Kolapo et al. (2012) and Caporale et al. (2004) using Johansen co-integration techniques and VAR models, respectively. Using Granger causality and co-integration models, Kolapo et al. (2012) investigate the empirical relationship that exists between Nigerian stock market development proxies--market capitalization, transaction values, and listed securities--and economic growth from 1990 to 2010. They found a one-way causal relationship that runs from market capitalization to economic growth and from economic growth to transaction value in a bidirectional manner, thus portraying some dimensions in their association. Caporale et al. (2004), in their cross-country analysis which included Nigeria, also established through vector autoregression models that good health of the stock market significantly accounted for economic growth by enhancing capital accumulation and allocation efficiency in

resources, and such findings stressed the relevance of well-functioning stock markets for the economic development process.

Other studies have employed methods of panel and sectoral analysis in analyzing the impacts of the stock market. For instance, Menyah et al. (2014) conducted the panel causality analysis in a number of Sub-Saharan African countries, such as Nigeria and Cote D'Ivoire. The latter detected no causality stemming from economic growth to the evolution of the stock market, thus contrasting evidence of the stock markets playing their developmental role as derived by other studies. Aibgovo and Izekor (2015) applied the cointegration, error correction mechanisms, and Granger causality methodologies with data from Nigeria over the period 1980 to 2011. The findings show that value traded and a strong turnover ratio have a favorable impact on economic growth, while the all-share index negatively influenced it. These mixed-methods approaches represent how fuzzy and capricious the results can be in any assessment of how the stock market contributes to economic development across different contexts and modeling techniques.

3.5 Empirical Gap of the Study

Despite the fact that Prior research has been conducted on Nigeria's economic growth and stock market development, there are still some information gaps with respect to how these changes occur along certain dimensions such as market size, liquidity, and efficiency, especially regarding their long-run effects. For example, Jibril et al. (2015) analyzed a number of various measures of stock market development, taking into consideration the market capitalization and turnover ratios. Some evidence shows that while market capitalization negatively correlates with economic growth, turnover ratios suggest their positive impact on the latter. However, this study also did not explicitly address issues of causality or long-run impacts. In the same direction, Echekeba et al. (2016) did not find any evidence of short-run causality but found a long-term correlation between economic growth and stock market development; they did not differentiate between liquidity and other stock market development metrics, so there is an empirical gap that needs to be examined in order to determine how stock market liquidity specifically affects Nigeria's long-term economic growth.

Besides this, most of the literature fails to provide a holistic analysis of stock market efficiency as a source of economic growth. In fact, previous studies like Kolapo et al. (2012) and Aibgovo & Izekor (2015) have largely focused on the market size indicators such as market capitalization or value-traded ratios. Although Kolapo et al. discovered a two-way causal relationship between economic growth and transaction values, they did not go into the matter of market efficiency, which is a crucial component in achieving sustainable growth. While Menyah et al. (2014) tried to investigate patterns of causality in other Sub-Saharan African countries, they were unable to provide the required insights into the efficiency of the stock markets and the impact on growth. The absence of such focused studies on the efficiency of the stock market in Nigeria motivates conducting a research study that will point to how an improvement in market efficiency can spur long-run economic growth.

There is a limited body of research that specifically examines the direct relationship between the size of Nigeria's stock market and economic growth. While studies from other countries, such as the work of Ofori-Abebrese et al. (2016) in Ghana, suggest that stock market size could negatively influence economic growth, this study seeks to address these gaps. It aims to evaluate how stock market size affects economic growth, the role of liquidity in driving long-term growth, and the efficiency of the market in supporting Nigeria's economic development.

Previous studies, such as those by Alajekwu and Achugbu (2011) and Okonkwo et al. (2015), primarily estimated relationships without delving into causal impacts. Addressing these nuances is crucial for policymakers aiming to enhance the efficiency of the stock market and its contribution to Nigeria's economic progress..

4. THEORETICAL FRAMEWORK AND METHODOLOGY

4.1 Introduction

This research examined the impact of stock market development on Nigeria's economic growth through a quantitative research approach. Employing quantitative analysis allowed for the identification of trends, patterns, and potential causal relationships within the data. This approach aligns closely with the study's objectives, which include assessing both the short-term and long-term effects of stock market performance indicators on economic growth within the Nigerian context...

4.2 Scope of the Study

The scope of the research encompasses a period of thirty years (1990-2023), a period selected to capture historical patterns, reforms, and structural changes in Nigeria's stock market. It therefore encompasses some of the key economic activities, policy reforms, and effects of globalization relevant to a firm understanding On the role of the stock market in economic growth

4.3 Data Sources

The information will be provided from the World Bank indicator and the Nigerian Stock Exchange (NSE) from 1990 to 2023. These bases give reliable and longitudinal data that are critical to the validity and robustness of findings in a time-series analysis (World Bank, 2022).

4.4 Model Specification

With minor adjustments to account for the unique characteristics of the Nigerian economy, the study used the model used by Carporale et al. (2004) and Adenuga (2010). Therefore, the following is the specification of the Vector Autoregressive (VAR) framework for multivariate time series:

$$\text{Real Per capital income} = f(\text{MCAP}, \text{FDI}, \text{VLT}, \text{TO}) \quad (4.1)$$

$$\text{RGDP} = \beta_0 + \beta_1 \text{MCAP} + \beta_2 \text{FDI} + \beta_3 \text{VLT} + \beta_4 \text{TO} + u \quad (4.2)$$

RGDP = Real Per Capital Income

MCAP = Market capitalization

FDI = Foreign Direct Investment

Vlt = Total Volume of Listed domestic Companies

TO = Turnover

β_0 = regression constant

$\beta_1, \beta_2, \beta_3, \beta_4$, = coefficients associated with independent variables

u = Error Term

4.4.1 Definition of variables

Real Per Capita Income RGDP: Real Growth and development of the economic output.

Market Capitalization (MCAP): this would indicate the size and value of the stock market.

Foreign Direct Investment: An inbound capital flow that reflects foreign investment in Nigeria.

Total Volume of Listed Companies VLT: Proxy for the depth of the equity market and economy-wide capacity to support companies.

4.5 Method of Analysis Adopted for the Study

4.5.1 Methods of analysis

Various econometric techniques are being utilized for this time-series data analysis to ensure that the study is not only robust but also insightful with regards to how the stock market can affect economic growth. Since the variables involved in the data are time-dependent, each of the selected methods below addresses specific aspects related to short- and long-term effects, interrelationships, and causal directions. (Huang & Wang, 2021).

4.5.2 Unit root test

The Augmented Dickey-Fuller test, which is used to check for stationarity among the variables, opens this section's analysis. In fact, stationarity is a requisite for any valid timeseries modeling to reduce the risk of misleading results on account of nonstationary data, as opined by Schwert (2020).

4.5.2.1 Augmented dickey-fuller test

The ADF test is conducted for the order of integration for the variables to ascertain whether they are in fact integrated of the first order, $I(1)$, which is necessary for any practical co-integration analysis. This is to avoid spurious regression outcomes in subsequent econometric analysis (Salisu & Raheem, 2022)

4.5.3 Johansen Co-integration Test

After conducting the unit root test, the Johansen Co-integration Test will be used to test if there is a long-run equilibrium relationship between the studied variables. The Johansen Co-integration is used to see if there is a long run link between variables after variables stationary test.

4.5.4 Causality Test

The direction of causation between the two sets of variables economic growth and stock market development indicators will be determined using the Granger causation Test. The test shall indicate whether the stock market indicators are useful predictors of the economic growth of Nigeria or not, and if so, whether the causality is unidirectional or bidirectional as indicated by Rahman et al. (2023) . Granger causality is used in this study to assess if the dependent and independent variables have unidirectional, bidirectional, or no directional causation

4.5.5 Vector autoregressive model

In order to investigate the short-term dynamics and long-term adjustments among the variables, a Vector Autoregressive Model analysis will be conducted at the end. Understanding the temporal relationship between economic growth and stock market development is crucial, and the VAR model provides a thorough depiction of the reciprocal interactions and, consequently, the short- and long-term effects. The

vector autoregressive model is used to represent short-term dynamics and rapid correction to long-term equilibrium.



5. DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

5.1 Introduction

This chapter presents the data analysis and interpretation of findings from the study on the impact of stock market development on economic growth in Nigeria between 1990 and 2023. The chapter aligns with the specified objectives of the study, including evaluating causality, impact of stock market size, liquidity, and efficiency on economic growth. Data is analyzed using econometric tools to draw insights for hypothesis testing.

5.2 Data Presentation

This section presents the descriptive statistics of key variables, including Market Capitalization (MCAP), Foreign Direct Investment (FDI), Volume of Listed Companies (VLC), Turnover (TURN), and Real GDP (GDP). The statistical summaries provide insights into data distribution, central tendency, and dispersion.

Table 5.1: Important Variables' Descriptive Statistics

	MCAP	FDI	VLC	TURN	GDP
Mean	9.221941	5.227353	1340.735	6.385588	268.5547
Median	6.075000	2.160000	180.5000	5.265000	258.3550
Maximum	40.92000	78.00000	14136.00	34.79000	574.1800
Minimum	0.018000	-0.190000	51.00000	1.000000	52.06000
Std. Dev.	10.21741	13.11141	3093.428	6.391707	168.5769
Skewness	1.049577	5.241517	3.037535	2.940935	0.108377
Kurtosis	3.732003	29.63649	11.64227	13.00842	1.559084
Jarque-Bera	7.001562	1160.812	158.0933	190.9169	3.007896
Probability	0.030174	0.000000	0.000000	0.000000	0.222251
Sum	313.5460	177.7300	45585.00	217.1100	9130.860
Sum Sq. Dev.	3445.048	5673.004	3.16E+08	1348.179	937799.3
Observations	34	34	34	34	34

Source: Author's Computation (2024)

The mean value of MCAP, 9.22, reflects the average size of the Nigerian stock market capitalization during the study period. The median value of 6.08 is lower than the mean, indicating a right-skewed distribution where some higher values significantly impact the mean. The maximum value of 40.92 shows periods of strong market performance, while the minimum value of 0.018 suggests times of negligible market activity. The standard deviation of 10.22 indicates a moderate level of variability, meaning the stock market size fluctuates considerably across the years. The skewness of 1.05 confirms a positive skew, and kurtosis of 3.73 suggests slightly heavier tails compared to a normal distribution, implying occasional extreme market capitalization values.

The mean FDI value is 5.23, but its high standard deviation of 13.11 points to significant volatility in foreign investment flows into Nigeria. The negative minimum value (-0.19) indicates periods of net capital outflows, while the maximum of 78.00 highlights a peak in inflows. The skewness of 5.24 reflects extreme positive skewness, suggesting a few years with exceptionally high FDI inflows. This is further supported by a kurtosis of 29.64, which indicates the presence of substantial outliers and heavy-tailed distribution. These figures suggest that while FDI contributed to the economy, it did so inconsistently, with sharp peaks and troughs.

The average number of listed companies was 1340.74, with a median of 180.50, showing a highly skewed distribution influenced by outliers. The maximum value of 14,136 and minimum value of 51 underscore the significant disparity between periods of low and high company listings. The standard deviation of 3093.43 reflects the extreme variability in the volume of listed companies, indicative of market expansion and contraction over the years. A skewness of 3.04 and kurtosis of 11.64 confirm a distribution characterized by infrequent but extremely high values, suggesting that most years recorded lower volumes, but a few years had extraordinary spikes.

Turnover, reflecting liquidity, has a mean of 6.39, showing moderate stock market activity. The median of 5.27 is close to the mean, suggesting a fairly consistent distribution of turnover. However, the standard deviation of 6.39 reveals moderate variability. The maximum turnover of 34.79 indicates periods of heightened trading activity, while the minimum value of 1.00 reflects subdued liquidity in some years. Skewness of 2.94 and kurtosis of 13.01 highlight significant

outliers, pointing to occasional years with unusually high liquidity that distort the overall pattern.

The mean GDP value of 268.55 signifies the average economic output during the study period, while the median of 258.36 indicates a symmetric distribution. The standard deviation of 168.58 shows moderate variability in economic performance. The maximum value of 574.18 and minimum value of 52.06 indicate wide fluctuations in Nigeria's economic output over the years. A skewness of 0.11 reflects near-symmetry in the GDP distribution, and a kurtosis of 1.56 suggests lighter tails, indicating fewer extreme GDP values compared to the other variables.

5.3 Unit Root Test

The primary variables in this study—Market Capitalization (MCAP), Foreign Direct Investment (FDI), Volume of Listed Companies (VLC), Turnover (TURN), and Gross Domestic Product (GDP)—were subjected to a unit root test to assess their stationarity. These variables are critical for evaluating the relationship between Nigeria's stock market development and economic growth during the period from 1990 to 2023.

The study guarantees the robustness of later econometric models, such as the Vector Autoregressive (VAR) model and the Johansen Co-integration Test, which are used to examine long-run and short-run dynamics, by examining the stationarity of these variables. To ascertain whether a unit root exists, each variable is put through the Augmented Dickey-Fuller (ADF) test, a well-liked econometric method. In the ADF test, the null hypothesis postulates that the series has a unit root (non-stationary), whereas the alternative hypothesis proposes stationarity.

Table 5.2: Level Enhanced Dickey Fuller Test

ADF AT LEVEL		
VARIABLES	ADF STATISTICS	REMARK
MCAP	0.9998	NON-STATIONARY
FDI	0.0000	STATIONARY
VLC	0.0863	NON-STATIONARY
TURN	0.1181	NON-STATIONARY
GDP	0.6264	NON-STATIONARY

ADF AT FIRST AND SECOND DIFFERENCE			
VARIABLES	ADF STATISTICS	ORDER OF INTEGRATION	REMARK
MCAP	0.0045	1(2)	STATIONARY
VLC	0.0006	1(2)	STATIONARY
TURN	0.0000	1(2)	STATIONARY
GDP	0.0019	1(1)	STATIONARY

The table presents the results of the Augmented Dickey-Fuller (ADF) test for various economic variables at different levels of integration. At the level of analysis, the variables market capitalization (MCAP), volatility (VLC), trading volume (TURN), and gross domestic product (GDP) indicate non-stationarity. Particularly, MCAP shows a very high ADF statistic of 0.9998, suggesting it is significantly far from being stationary, while GDP also shows considerable non-stationarity with a statistic of 0.6264. Conversely, foreign direct investment (FDI) stands out with an ADF statistic of 0.0000, clearly indicating its stationarity at this level.

When examining the first and second differences, all previously non-stationary variables (MCAP, VLC, TURN, and GDP) demonstrate stationarity. Specifically, MCAP and VLC have very low ADF statistics (0.0045 and 0.0006, respectively), confirming they are stationary after first differencing, making them I(2) processes. Similarly, TURN shows a stationarity level with an ADF statistic of 0.0000, also classified as I(2). GDP, though it was non-stationary at the level, becomes stationary after first differencing with an ADF statistic of 0.0019, indicating it is I(1). Overall, these results illustrate that while some variables exhibit non-stationarity at the level, they become stationary at higher orders of differencing, highlighting the need for careful data transformation in time series analysis.

5.4 Johansen Cointegration Test

In this study, the Johansen cointegration test is employed to investigate the existence of long-term relationships among Gross Domestic Product (GDP), Market Capitalization (MCAP), Foreign Direct Investment (FDI), Volume of Listed Companies (VLC), and Turnover (TURN) in Nigeria. Their potential cointegration would suggest that these series move together over time, maintaining their relationship steady despite potential short-term volatility. These variables serve as proxies for the crucial aspects of economic growth and stock market development. This test counts the number of cointegrating equations using both the Maximum Eigenvalue and Trace statistics., whose outcomes guide the selection of appropriate econometric models, including VECM for long-run dynamics or unrestricted VAR models when focusing on the short-run interactions. The result from such an analysis would therefore turn out to be an invaluable set of insights into the interconnectedness of the aforementioned stock market indicators with contributions to the economic development of Nigeria.

The Johansen Cointegration Test results indicate no cointegrating relationships at the 0.05 significance level among GDP, MCAP, FDI, VLC, and TURN. This is based on both the Trace and Maximum Eigenvalue tests, as detailed below.

Table 5.3: Johansen Cointegration Test

Null Hypothesis (r)	Trace Statistic	Critical Value (0.05)	Max-Eigen Statistic	Critical Value (0.05)
$r = 0$	55.24173	69.81889	25.95208	33.87687
$r \leq 1$	29.28965	47.85613	11.96339	27.58434
$r \leq 2$	17.32626	29.79707	9.696662	21.13162
$r \leq 3$	7.629602	15.49471	7.629602	14.26460
$r \leq 4$	0.000000	3.841466	0.000000	3.841466

The absence of cointegration implies that the variables do not share a stable long-run relationship. Deviations in one variable are not systematically corrected by adjustments in the others over time. This result justifies focusing on short-run dynamics, such as using a Vector Autoregressive (VAR) model, instead of Vector Error Correction Models (VECM) that rely on cointegration.

5.5 Granger Causality Test

For this study, the Granger causality test is applied to examine the predictive relationships between Gross Domestic Product (GDP), Market Capitalization (MCAP), Foreign Direct Investment (FDI), Volume of Listed Companies (VLC), and Turnover (TURN). These factors are essential to comprehending how Nigeria's economic growth and stock market development interact. The test results help identify whether changes in one variable lead or lag changes in another, guiding the interpretation of short-term dynamics and informing policy recommendations.

Table 5.4: Pairwise Granger Causality Tests

Date: 11/23/24 Time: 08:56			
Sample: 1990 2023			
Lags: 1			
Null Hypothesis:	Obs	F-Statistic	Prob.
MCAP does not Granger Cause GDP	33	0.70215	0.4087
GDP does not Granger Cause MCAP		0.09123	0.7647
FDI does not Granger Cause GDP	33	2.55087	0.1207
GDP does not Granger Cause FDI		1.23231	0.2758
VLC does not Granger Cause GDP	33	4.27915	0.0473
GDP does not Granger Cause VLC		0.01925	0.8906
TURN does not Granger Cause GDP	33	0.04362	0.8360
GDP does not Granger Cause TURN		0.00221	0.9628
FDI does not Granger Cause MCAP	33	18.5920	0.0002
MCAP does not Granger Cause FDI		3.73049	0.0629
VLC does not Granger Cause MCAP	33	0.03602	0.8508
MCAP does not Granger Cause VLC		1.19040	0.2839
TURN does not Granger Cause MCAP	33	1.26150	0.2703
MCAP does not Granger Cause TURN		0.02440	0.8769
VLC does not Granger Cause FDI	33	0.60069	0.4444
FDI does not Granger Cause VLC		0.15508	0.6965
TURN does not Granger Cause FDI	33	0.55444	0.4623
FDI does not Granger Cause TURN		0.03943	0.8439
TURN does not Granger Cause VLC	33	0.41479	0.5244
VLC does not Granger Cause TURN		0.01024	0.9201

Source: Author's Computation (2024)

The Granger causality test results provide some helpful insight into the time-related relationships between the following variables in Nigeria: market capitalization, turnover, foreign direct investment, volume of listed companies, and gross domestic product.. The analysis indicates no evidence of causality between MCAP and GDP either way, as the F-statistics 0.70215 and 0.09123 and their respective probabilities 0.4087 and 0.7647 fail to reject the null hypotheses. This

therefore, implies that changes in stock market size do not significantly predict economic growth, and neither does economic growth forecast stock market size.. Similarly, the relationships between FDI and GDP exhibit no significant causality in either direction, as indicated by the high p-values (0.1207 and 0.2758). This implies that foreign direct investment does not directly drive economic growth or vice versa in the Nigerian context.

A significant unidirectional relationship is observed between VLC and GDP, where VLC Granger causes GDP ($F=4.27915, p=0.0473$). This indicates that changes in the volume of listed companies can predict economic growth, highlighting the importance of an active and expanding stock market in influencing Nigeria's economic performance. However, GDP does not Granger cause VLC ($F=0.01925, p=0.8906$), suggesting that economic growth does not influence the volume of listed companies. On the other hand, TURN shows no causal relationship with GDP in either direction, as evidenced by the non-significant F-statistics (0.04362 and 0.00221) and high p-values (0.8360 and 0.9628). This suggests that stock market liquidity, as measured by turnover, does not significantly predict or respond to economic growth.

The relationship between FDI and MCAP is noteworthy, as FDI significantly Granger causes MCAP ($F=18.5920, p=0.$), implying that foreign direct investment plays a crucial role in influencing the size of the stock market. Conversely, the causality from MCAP to FDI is marginally significant ($F=3.73049, p=0.0629$), hinting at a potential but weak feedback mechanism where stock market size might slightly influence foreign investment flows. No significant causality is found between VLC and MCAP, TURN and MCAP, VLC and FDI, or TURN and FDI, as the respective p-values for all these pairs exceed the 5% significance threshold. Additionally, TURN and VLC exhibit no evidence of Granger causality in either direction, indicating that stock market liquidity and the volume of listed companies operate independently in terms of their predictive relationships.

In summary, the Granger causality test highlights a few critical relationships: VLC significantly predicts GDP, underscoring the influence of market activity on economic growth, and FDI strongly predicts MCAP, reflecting the role of foreign investment in shaping stock market size. No other variable seems to have a causal relationship, hence the statistical implications of their relationships can be described

as weak or being influenced by factors outside this analysis. The findings offer a mixed set of information on the short-term dynamics between stock market development indicators and economic growth in Nigeria.

5.6 Vector Auto Regression Estimates

The application of VAR in this study will be helpful to the research objectives, considering how these variables interact with each other over time.

Table 5.5: Vector Autoregression Estimates

Date: 11/23/24 Time: 08:59	
Sample (adjusted): 1992 2023	
Included observations: 32 after adjustments	
Standard errors in () & t-statistics in []	
	GDP
GDP(-1)	1.210684 (0.18053) [6.70633]
GDP(-2)	-0.236524 (0.17871) [-1.32349]
C	42.10753 (18.6681) [2.25558]
MCAP	-2.166986 (1.76107) [-1.23050]
FDI	0.926968 (0.66929) [1.38500]
VLC	-0.008932 (0.00301) [-2.96440]
R-squared	0.927833
Adj. R-squared	0.913955
F-statistic	66.85548

Source: Author's Computation (2024)

The results obtained using the VAR model go a long way in explaining stock market development and economic growth in Nigeria with particular reference to the general and specific objectives of the study.

Causality between the Size of the Nigerian Stock Market and Economic Growth

At the 0.05 level, the trace test shows no cointegration.

* Indicates that the hypothesis is rejected at the 0.05 level. **MacKinnon-Haug-Michelis (1999) p-values

Assessing the causal relationship between the size of the Nigerian stock market, as measured by Market Capitalization (MCAP), and economic growth, as shown by GDP, is the study's first particular goal. As the coefficient of $GDP(-1) = 1.210684$ with a t-statistic of 6.70633, which is highly significant and thus suggests good self-prediction, the VAR results demonstrate that the lagged values of GDP significantly contribute to explaining its present value.. However, the coefficient for MCAP, which is -2.166986, is insignificant statistically, since the t-statistic stands at -1.23050 which suggests that market capitalization, or the size of the stock market, has no statistically significant short-term impact on Nigeria's economic growth. This finding is consistent with the literature, which shows that while stock market development can help mobilize capital and boost economic growth, the relationship between market size and growth is typically weak in developing nations because of structural issues and market inefficiencies.. Otekunrin & Olayemi, 2023, thus conclude that this might be an indication of mediation from other factors-for instance, investor confidence and macroeconomic stability.

Impact of Stock Market Liquidity on Long-Run Economic Growth

Examining how stock market liquidity affects long-term economic growth is the study's second goal. The Nigerian stock market's liquidity is gauged by the volume of listed companies, or VLC. The VAR result shows that the VLC coefficient is -0.008932 with a t-statistic of -2.96440, which is significant at the 5% level. This negative coefficient infers that the higher the liquidity, proxied by the volume of listed companies, the lower the GDP in the short term, probably due to excessive volatility or over-speculation. This result supports the study of Babatunde (2013), who noted that though generally liquidity is a positive influence on market stability,

sometimes in some developing markets, this liquidity-driven volatility creates short-run aberrations in the economy. Despite this fact, the negative relationship could still be attributed to the structural inefficiencies in the Nigerian market, where high liquidity might not exactly be converted into productive investments that add to the long-term growth of the economy.

Impact of Stock Market Efficiency on Long-Run Economic Growth
The ultimate aim is to examine the effect of stock market efficiency on long-run economic growth in Nigeria. The efficiency is reflected in a manner in which the stock market quickly catches information and reflects the correct values of assets. Although the VAR model does not explicitly include a direct efficiency measure, the impact of FDI can be viewed through the general link with market efficiency via international integration and better information flows. The coefficient for FDI is 0.926968 with a t-statistic of 1.38500, meaning that FDI is positively related to GDP but not in a statistically significant manner. This perhaps, means that although FDI has the potential to bring improvement in market efficiency via better corporate governance and advanced financial practices, long-term growth impacts in Nigeria are very minimal. This phenomenon might be credited to systemic issues such as political instability and regulatory obstacles (Adebisi & Adewuyi, 2022). This is further supported by the fact that the size of the stock market and its corresponding liquidity do not have an effect on GDP; the weak relationship of FDI underlines that improvement in market efficiency, institution, and regulatory framework would make Nigeria stock grow fully.

5.7 Discussion of Findings

Objective 1: Evaluating the Causality Between the Size of the Nigerian Stock Market and Economic Growth

The first objective of this study is to assess the causality between the size of the Nigerian stock market, proxied by MCAP, and economic growth, proxied by GDP. From the VAR results, it can be observed that no causality issue exists between MCAP and GDP since the F-statistics stand at 0.70215 ($p = 0.4087$) for $\text{MCAP} \rightarrow \text{GDP}$ and 0.09123 ($p = 0.7647$) for $\text{GDP} \rightarrow \text{MCAP}$. This result indicates that changes in the Economic growth is not predicted by the size of the stock market, and the expansion of the Nigerian stock market is not much impacted by economic growth.

This finding corroborates the study undertaken by Otekunrin & Olayemi 2023, who recorded an insignificant or a weak direct linkage in the magnitude of the stock market and economic growth in Nigeria. According to them, though a huge stock market is considered an important indicator of financial development, the measurement of its size does not necessarily corresponds with the real performance of the economy, considering distortion in market inefficiency and lack of deep integration with the real economy. In contrast, this result is inconsistent with the study of Adebisi & Adewuyi (2022), which argued that the influence of the development of stock markets might be stronger on economic growth in developing countries, particularly along with markets and regulatory improvements. This may be due to divergence in findings, which results from the differences in countries' institutional maturity and market infrastructure, a condition that creates a case for structural reforms in the Nigerian market, aiming to elevate its impact on the general economy.

Objective 2: Evaluating the Impact of Stock Market Liquidity on Long-Run Economic Growth

The second objective tries to test the impact of stock market liquidity proxied by VLC on the long-run growth of GDP. The VAR results, however, significantly show a negative association between VLC and GDP, with $F=4.27915$ and $p=0.0473$: thus, indicating increased stock market liquidity reflected by the volume of listed companies is associated with reduced economic growth. This finding is quite interesting and suggests that, in Nigeria, high liquidity may not necessarily contribute to steadier or more sustainable economic growth, perhaps because of speculative behaviors and market vulnerabilities.

The above negative relationship between liquidity and GDP corresponds with the findings of Babatunde (2013), who posited that high liquidity in emerging markets, as important as it is to attain efficiency in the capital market, has often culminated in speculative bubbles and volatility, which derail long-run economic stability. Moreover, another study by Adebisi & Adewuyi, 2022, bolsters this assertion when it postulates that high stock turnover can feed market volatility at the expense of productive investment in the real economy. By contrast, a study by Akinola & Fakunmoju (2016) reported that liquidity contributes to growth only in those markets which have gained high regulatory framework and securities of

investors, showing in this respect that in the lack of such securities, liquidity would bring devastating impacts, as happened in Nigeria.

Objective 3: Investigating the Impact of Stock Market Efficiency on Long-Run Economic Growth

The third objective of the research tries to assess how stock market efficiency, often associated with FDI, affects long-run economic growth. From the VAR, there is an insignificant positive relationship between FDI and GDP, showing that though FDI would perform its role in enhancing economic growth, the rate at which this influence would be carried out in the Nigerian environment is rather weak. That is, $F=0.926968$ and $t=1.38500$. This therefore, suggests that while foreign investment brings in better financial practices and develops markets, it does not necessarily improve the long-term economic performance of Nigeria.

This finding agrees with the work of Aliyu & Ibrahim 2020, who observed that despite the increase in foreign direct investment coming into Nigeria, the total impact on economic growth remains minimal owing to political instability, weak infrastructural structures, and inefficiency in regulations. This result also corroborates the finding of Akinola & Fakunmoju (2016), who, though noting that FDI promotes market efficiency, its salutary effect on growth is dampened in Nigeria due to structural bottlenecks and underdeveloped sectors of the economy. This further suggests that increasing the absorptive capacity of the Nigerian economy through institutional reforms and infrastructure development may help increase the impact of FDI on long-run economic growth.

5.8 Testing of Hypotheses

Hypothesis 1: Stock Market Size (MCAP) Has a Significant Impact on Economic Growth (GDP) The null hypothesis states that there is no discernible relationship between GDP and MCAP. The VAR data indicates that MCAP has no discernible direct impact on GDP, as indicated by the statistically negligible coefficient for MCAP ($t=-1.23050, p=0.4087$ $t = -1.23050, p = 0.4087$ $t=-1.23050, p=0.4087$).

Hypothesis 2: Economic Growth is Significantly Affected by Stock Market Liquidity (VLC)

The second hypothesis examines whether the volume of listed businesses (VLC), a gauge of stock market liquidity, and economic growth are significantly correlated. Higher liquidity may have a short-term detrimental effect on income growth, according to the VAR results, which indicate a statistically significant negative association between VLC and GDP ($F=4.27915, p=0.0473$). Thus, we accept the alternative hypothesis that stock market liquidity significantly influences economic growth and reject the null hypothesis..

Hypothesis 3: Economic Growth Is Significantly Affected by Stock Market Efficiency (FDI)

The third hypothesis examines whether foreign direct investment (FDI), which is a measure of stock market efficiency, significantly affects economic growth. According to the VAR results, there is a positive but statistically insignificant correlation between FDI and GDP ($t=1.38500, p=0.2758$), indicating that FDI has no discernible effect on economic growth. Consequently, we are unable to rule out the null hypothesis that foreign direct investment has no discernible effect on economic development.

6. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

6.1 Introduction

The study has attempted to investigate the impact of stock market developments on Nigeria's economic expansion with specific objectives that anticipate discussing the causal relationship between stock market size and economic growth, stock market liquidity, and the effectiveness of the stock market in influencing economic growth. Various econometric models and tests, such as the Vector Autoregression-VAR model, Granger causality tests, and Johansen cointegration tests, were applied in the study, taking into consideration data from 1990 to 2023. This chapter summarizes the theoretical and empirical findings and provides some important recommendations based on the findings of this study.

6.2 Summary of Work

This study's main goal was to assess how the evolution of the stock market affected Nigeria's economic expansion. The study's particular goals were to:

1. Test the causality of the size of the Nigerian stock market with its economic growth.
2. Examine the effect of stock market liquidity proxied by VLC on long-run economic growth.
3. Examine the effects of FDI-induced stock market efficiency on economic growth.

This study's quantitative research design makes use of secondary data collected between 1990 and 2023, including important macroeconomic variables such as GDP, Market Capitalization (MCAP), Foreign Direct Investment (FDI), Volume of Listed Companies (VLC), and Turnover (TURN). The research used Vector Autoregression (VAR) to examine the short-term dynamics and interdependencies of these variables, performed Granger causality tests to determine the direction of causality between economic growth and stock market development,

and then used the Johansen cointegration test to determine the variables' long-term relationship.

The literature review included a thorough analysis of previous research on the connection between economic growth and stock market development, especially in emerging markets. Several scholars, including Adebisi & Adewuyi (2022), Otekunrin & Olayemi (2023), and Babatunde (2013), have highlighted the importance of the stock market in fostering economic growth by providing access to capital, improving market liquidity, and facilitating foreign investment. However, these studies also point out that stock market size alone does not guarantee economic growth, especially in countries with inefficient markets, political instability, and weak institutional frameworks. The review also identified gaps in the literature, especially in the context of Nigeria, where empirical evidence on the impact of stock market liquidity and efficiency on economic growth remains limited.

The study employed a quantitative research design with time-series data from 1990 to 2023. The data was analyzed using econometric techniques, primarily the VAR model, to look at the short- and long-term relationships between the stock market variables and economic growth. While the Johansen cointegration test assessed whether there were long-term equilibrium linkages between the variables, the Granger causality test helped determine the direction of causation between the variables. Descriptive statistics such as mean, standard deviation, and skewness were used to summarize the data. The hypotheses were assessed using standard significant thresholds (5% and 10%) and many levels of analysis..

6.2 Summary of Findings (Theoretical and Empirical)

The study discovered a number of noteworthy findings on the connection between Nigeria's stock market development and economic growth: The VAR results showed no discernible causal relationship between GDP and stock market size (MCAP). This finding supports the literature by Otekunrin & Olayemi (2023), who suggested that while stock market size may be an indicator of financial development, its direct impact on economic growth remains limited, especially in emerging markets like Nigeria. The study found a significant negative relationship between stock market liquidity (VLC) and economic growth (GDP), indicating that increased liquidity may lead to volatility and instability, rather than fostering long-term growth.

This result aligns with Babatunde (2013), who argued that excessive liquidity in developing economies could lead to speculative trading and market instability, which may hinder sustainable economic growth. Foreign Direct Investment (FDI) was found to have a positive, yet statistically insignificant, relationship with GDP. This finding suggests that while FDI can enhance market efficiency by bringing in capital and advanced financial practices, its effect on Nigeria's economic growth is limited by structural issues such as poor infrastructure and political instability. This result corroborates Akinola & Fakunmoju (2016), who argued that the full benefits of FDI are not realized in economies with weak institutional frameworks and underdeveloped infrastructure.

6.3 Conclusion

This study offers insightful information about how the rise of the stock market contributes to Nigeria's economic expansion. The results imply that although stock market efficiency and liquidity might affect economic growth, growth is not much influenced by stock market size alone. The weak correlation between FDI and growth underscores the necessity of strengthening the nation's institutional and infrastructure frameworks in order to fully benefit from foreign investment, while the negative relationship between GDP and stock market liquidity highlights Nigeria's struggles with market volatility. All things considered, the report emphasizes the necessity of infrastructure development and regulatory changes to maximize the benefits of the stock market for Nigeria's economic expansion.

6.4 Recommendations

The study's conclusions lead to the following suggestions:

1. The Nigerian stock market should focus on improving market transparency and reducing information asymmetry. Regulatory reforms should be aimed at strengthening investor protection and improving market infrastructure to create a more stable environment for long-term investment.

2. Regulate Liquidity to Avoid Speculation: Policymakers should implement measures to reduce excessive liquidity-driven volatility in the market. This can be

achieved through stricter regulations on speculative trading and enhanced market surveillance.

3. **Improve Infrastructure to Attract FDI:** The Nigerian government must address the country's infrastructural deficiencies, particularly in transportation, energy, and communication, to make the market more attractive to foreign investors. Improvements in these areas will help harness the full potential of FDI.

6.5 Suggestions for Further Studies

1. Further research could focus on the impact of stock market reforms, such as market liberalization, on economic growth. Additionally, exploring the effects of macroeconomic variables, such as inflation, exchange rates, and interest rates, on stock market performance could provide a more comprehensive view of the economic dynamics.

2. Future studies could also investigate sector-specific effects, particularly in agriculture and manufacturing, which play a crucial role in Nigeria's economic structure.

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