

INSTITUTE OF GRADUATE STUDIES

DEPARTMENT OF BUSINESS ADMINISTRATION

IMPACT OF HIGH FOREIGN EXCHANGE RATE ON BUSINES IN NIGERIA (1970-2020)

MBA THESIS

AUGUSTINE PETER GARGU

Nicosia

January 17, 2023



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January 17, 2023

Approval

We certify that we have read the thesis submitted by AUGUSTINE PETER GARGU titled "THE IMPACT OF HIGH EXCHANGE RTATE ON BUSINESS IN NIGERIA (1970-2020)" and that in our combined opinion it is fully adequate, as a thesis for the degree of Master of Educational Science.

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Declaration

I hereby declare that all information, documents, analysis, and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of the Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study

AUGUSTINE PETER GARGU

January 17, 2023

Acknowledgments

To begin, I would like to convey my appreciation to the Almighty Allah for having mercy on me and being willing to forgive me for the mistakes that I have made. In addition, I want to express my gratitude to him for bestowing his favor upon me. I want you to know that I am thankful for everything you have done for me because I would not be where I am now without you. I would like to extend my profound thanks and appreciation to the highest God and to all those who consented to participate in this project. I am grateful to them for the time they spent and the courage they displayed in sharing their insights. I owe the greatest debt to them, and all I can do is hope that our joint effort will benefit each of you in the same way that it was to me. I was immeasurably enriched by the experience of working under the supervision of Professor Mehdi Seraj, who possesses a great level of knowledge and who has an act of encouraging, correcting, and directing me in every situation possible, which enabled me to finish my project.

My education at the time came at a significant financial and emotional expense to those closest to me. I would like to express my gratitude to my family for being a significant motivation source. Therefore, with all due respect, I would like to offer my gratitude to them. In addition, friends for their unwavering support and comprehension.

I would like to express my gratitude to everyone who has helped me along the way and contributed to the accomplishment of my journey.

AUGUSTINE PETER GARGU

Abstract

THE IMPACT OF E-COMMERCE ON THE GERMAN ECONOMIC GROWTH (1970-2020)

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MA Department of Business Administration

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The impact of high exchange rate on business in Nigeria has had a significant impact on the business cycle in Nigeria. This research was conducted to understand the extent to which the rise of the exchange rate has impacted the growth of Nigerian businesses and the economy. This research also investigates the negative effects of the high exchange rate on the Nigerian economy and the difficulties that have surfaced as a direct consequence of it. Utilizing the Augmented Dickey-Fuller (ADF) model and the Philip-Perron experiment, the authors of this study explored the short-run and longrun correlations between Germany's economic growth and e-commerce from 1970 to 2020. Both models were utilized to understand whether or not there is a link between the two variables. The ARDL bound test suggests a long-term association between variables since the F-statistics are larger than the lower and upper bands. The ARDL long-run test showed that Trade, Inflation Rate, and Exchange Rate have significant long-term relationships with economic growth. The ARDL short-run analysis showed that all variables had statistical significance. The short-term trade-business cycle association was -0.1498. The business cycle decreases by 0.1498 for every unit of trade. 0.0231 represents the long-term positive effects of trade growth. Nigeria's tradebased GDP stimulates the business cycle and economy. Nigerian private enterprises expand through loans, creating jobs and economic opportunities. The real exchange

rate lowers long-term economic growth by 0.2001 and short-term growth by 0.0890 per percentage point. ECM results show that the value must be significantly negative and between zero and one to fit the prior chapter's economic conditions. ECM also found it statistically significant negative. 0.0000 is -0.488. Predicted 48% adjustment. The independent variable explains GDP growth, an economic measure, to 85.0 percent, according to the improved R-square result. Probabilistic F-statistics connect all variables. 1.89 Durbin-Watson scores indicate positive autocorrelation and no multicollinearity.

Keywords: Business Cycle, Exchange Rate, Gross Domestic Product, Inflation,

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Nijerya'daki ticaret üzerindeki yüksek döviz kurunun etkisi, Nijerya'daki iş çevrimi üzerinde önemli bir etkiye sahip olmuştur. Bu araştırma, döviz kurundaki artışın Nijerya işletmelerinin ve ekonomisinin büyümesini ne ölçüde etkilediğini anlamak için yapılmıştır. Bu araştırma aynı zamanda yüksek döviz kurunun Nijerya ekonomisi üzerindeki olumsuz etkilerini ve bunun doğrudan bir sonucu olarak ortaya çıkan zorlukları da incelemektedir. Bu çalışmanın yazarları, Augmented Dickey-Fuller (ADF) modelini ve Philip-Perron deneyini kullanarak, 1970'den 2020'ye kadar Almanya'nın ekonomik büyümesi ile e-ticaret arasındaki kısa ve uzun vadeli korelasyonları araştırdı. iki değişken arasında bir bağlantı olup olmadığını anlayın. ARDL sınır testi, F istatistikleri alt ve üst bantlardan daha büyük olduğu için değişkenler arasında uzun vadeli bir ilişki önerir. ARDL uzun vadeli testi, Ticaret, Enflasyon Oranı ve Döviz Kurunun ekonomik büyüme ile önemli uzun vadeli ilişkilere sahip olduğunu gösterdi. ARDL kısa dönem analizi, tüm değişkenlerin istatistiksel olarak anlamlı olduğunu gösterdi. Kısa vadeli ticaret-iş döngüsü ilişkisi -0,1498 idi. İş çevrimi, her ticaret birimi için 0,1498 azalmaktadır. 0.0231, ticaret büyümesinin uzun vadeli olumlu etkilerini temsil ediyor. Nijerya'nın ticarete dayalı GSYİH'sı iş çevrimini ve ekonomiyi canlandırıyor. Nijeryalı özel şirketler krediler yoluyla genişliyor, istihdam ve ekonomik fırsatlar yaratıyor. Reel döviz kuru, uzun vadeli ekonomik büyümeyi yüzde puan başına 0,2001 ve kısa vadeli büyümeyi 0,0890 düşürür. ECM sonuçları, önceki bölümün ekonomik koşullarına uyması için değerin önemli ölçüde negatif ve sıfır ile bir arasında olması gerektiğini göstermektedir. ECM ayrıca istatistiksel olarak anlamlı negatif buldu. 0,0000, -0,488'dir. Öngörülen %48 düzeltme. Bağımsız değişken, iyileştirilmiş R-kare sonucuna göre ekonomik bir ölçü olan GSYİH büyümesini yüzde 85,0'e kadar açıklıyor. Olasılıksal F istatistikleri tüm değişkenleri birbirine bağlar. 1.89 Durbin-Watson puanları, pozitif otokorelasyona işaret eder ve çoklu bağlantı olmadığını gösterir.

Anahtar Kelimeler: Döviz Kuru, Gayri Safi Yurtiçi Hasıla, Enflasyon, İş Döngüsü

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ADF: Augmented Dickey-Fuller

ARDL: Auto Regression Distributed Lag

BOP: Balance of payment

CBN: Central bank of Nigeria

DSGE: Dynamic stochastic general equilibrium

ECM: Error correction model

FDI: Foreign Direct Investment

GDP: Gross Domestic Product

IMF: International Monetary Fund

MERM: Military exchange rate model

NBS: National Bureau of statistic

OLS: Ordinary Least Square

PP: Philip-Perron

PPP: Purchasing Power Parity

SAP: Structural adjustment program

SMEs: Small Medium Enterprises

UT: Error Term

VAR: Vector Autoregressive

CHAPTER I

Introduction

A period of fluctuating economic activity characterized by expansions and contractions in real GDP is known as a business cycle, sometimes referred to as an economic cycle. In other words, it is a period during which the economy grows, reaches its peak, shrinks, and finally hits its lowest point.

The term "business cycle" refers to the periodic ups and downs that several key economic indices, including output, consumption, investment, employment, and pricing, experience. According to Gottfried (1946), Burns and Mitchell (1946), and Harding and Pagan (2003), movements of this kind happened in a cyclical pattern that may be broken down into four distinct phases: expansion, contraction, downturn, and recovery.

This shows that long-term economic patterns tend to be followed by wave-like fluctuations in overall economic activity, which is typically represented by real GDP.

As a result of the Structural Adjustment Program-driven policy that caused the Naira to fluctuate in 1986, the question of how the high exchange rate affects the business cycle has become a hot topic of discussion in Nigeria. This is a direct result of the fluctuation of the Naira in 1986. (SAP). One of the fundamental focuses of any economy needs to be on keeping a stable exchange rate with one's trading partners. Even though the country attempted to attain this goal by engaging in currency depreciation to increase exports and keep a steady rate of exchange, Nigeria was not successful in accomplishing this goal. Because the country was unable to accomplish this objective, the manufacturing and economic sectors of Nigeria were forced to deal with the challenge posed by an exchange rate that was either continually fluctuating or extremely high. This was not only required as a result owing to the devaluation of the naira but it was also strengthened due to a low and limited productive base as well as the rising costs of imports. In addition to that, because of the naira's falling value, this was essential for the country's economy. The body in charge of economic authority devised a number of regulations and procedures managing the exchange rate to prevent such an occurrence from happening and to maintain a stable exchange rate. Conversely, there wasn't a lot of effort made toward the aim of keeping the existing exchange rate. Businesses and enterprises operating during the study period are negatively impacted by the problem of a high exchange rate for the reasons stated above.

Exchange rate policy is an important tool in macroeconomic management because of the significant impacts that currency depreciation can have on the balance of payments, economic disparity, and economic development. As a result, fluctuations in exchange rates could have devastating repercussions under these conditions. This is especially crucial because the exchange rate is continually changing. It's not shocking that it's the key factor in determining the course of several other macroeconomic variables (Oyejide, 1985). One country that is exemplifying this trend is Nigeria, which has recently reverted to its former path of quick economic success, which was followed by an equally rapid growth in its reliance on imports. That is why it is not surprising that Nigeria is bearing the brunt of this situation.

Nigeria's economy is widely considered to be among the most advanced on the entire African continent. Notwithstanding this, the Covid 19 Pandemic caused a decline in Nigeria's GDP in the second and third quarters of 2020. The drop here was roughly 1.92%. The country's gross domestic product (GDP), which had recovered from a dip in 2016 to expand by about 2.2% in 2019, reportedly plummeted as a result, as reported by Reuters.

This swing in the business cycle was brought on by the worldwide decrease in demand for crude oil, which in turn brought about a rise in prices. The effects of the lockdown and the COVID restrictions were extremely severe in many countries. There was a slowdown in activity across a wide range of industrial sectors, including manufacturing, aviation, trade, hospitality, and transportation.

On the other hand, this decline was only temporary; once at least some of the COVID laws were relaxed in the fourth quarter of 2020, Nigeria's economy began to begin to recover. This trend of progress was observed all the way until the first quarter of 2021. According to data collected and collated by the National Bureau of Statistics (NBS), which was the official statistics arm of the country at the time, the growth rate of the nation increased by 0.11% in the fourth quarter of the year 2020. According to the data provided by the national statistics bureau. In contrast, non-oil- linked industries such as food manufacturing, communications, building, crop production, and real estate showed amazing growth of 1.69% during this same time period.

The worst predictions made by the IMF regarding the impact of the epidemic on Nigeria did not come true. Thankfully, the decline in GDP was only 3.2% rather than substantially greater. The International Monetary Fund (2021) projects that this would bring in a 1.5% growth in the GDP of the country by the year 2021.

The private sector, with its many dynamic advantages, is an essential catalyst in today's economy, driving forward the development of change. This transformation is being driven by the private sector. Even when contrasted with other fields, the business world in industrialized countries is often years ahead of the curve when it comes to innovation. It is a technique to raise productivity in sectors such as import substitution and export expansion, as well as increase employment, investment, and cross-sectoral cooperation. Specifically, it is a way to: (Fakiyesi, O., & Akani, O. (2005). On the other hand, Nigeria's economy is not sufficiently diversified, and it only puts a small portion of its overall industrial capability to use.

While the company has consistently led its sector in annual growth rate terms since records began being kept in 1973–1974. As documented in (Obadan, 1994). Recently, there has been a worrying increase in the sector's reliance on the importation of non-labor input from other sectors (Okigbo, 1993). Therefore, the inability to import may reduce the output of manufactured items. As Oyejide (1985) argues, the collapse of the Bretton Woods System led to widespread currency devaluation and uncertainty, including in Nigeria. Because the Bretton Woods System was dismantled, there has been a great deal of unpredictability in the economy. Umubanmwen (1995) claims that this makes it harder for citizens to bring goods into the country. Devaluation, which makes what was already a difficult position even more difficult, has not had a significant impact in a direction that is favorable to Nigeria's economy, despite the fact that it has made the situation more difficult. Despite the fact that devaluation has made the situation more difficult, it has not had a significant impact in a direction with the situation more difficult is a significant impact in a direction that is favorable to Nigeria's economy.

Companies that conduct business in developing nations such as Nigeria confront the extra issue of resolving any conflicts that may arise with the natural vicinity wherein their business units are based. This is a challenge that is unique to developing nations. To put it simply, this is a problem that can only be faced by countries that have not yet completed the process of industrialization. In addition to the difficulty of maintaining separate units that are not connected to one another, it will also be necessary to find a solution to this problem. This lends credence to the idea that an elevated degree of difference within the production activities of businesses leads to a larger number of problems that need to be solved. Specifically, this lends credence to the idea that a high degree of variation in the production activities of businesses leads to an increase in the number In particular, this offers support to the notion that a high degree of variance in the production activities of firms ultimately results in the creation of a While the 1800s, a large portion of Nigeria's economic growth can be credited to the private sector of the country, which has played an important part in the development of the country. This sector has established itself as a leader in a broad range of industries, including, to name just a few of those areas: manufacturing, marketing, vehicle production, logistics, real estate, agricultural production, and electrical production. Despite the numerous shifts in government policy and economic upheavals that have taken place in Nigeria since the founding of many of the country's conglomerates, many of those companies have been able to thrive and remain in business for many decades. This is occurring irrespectively of the fact that political and economic stability in Nigeria has been unstable since the inception of many of the country's conglomerates. Given Nigeria's tumultuous political and economic background, this is a huge deal.

In addition, throughout the course of the last several years, this sector has made a considerable contribution to Nigeria's labor force as well as the supply of goods and services that come out of the country. Because the vast majority of companies in operation today conduct business on a global scale, it is absolutely essential for the employees of these companies to have a solid understanding of the various currencies used in other countries as well as the exchange rates that govern the buying and selling of those currencies.

The domestic selling prices, earnings, the allocation of resources, and decisions about investments are all influenced by the exchange rate, making it a crucial component in the prosperity of businesses in Nigeria. In addition to that, the current exchange rate is a key element to take into account. This is only one of a number of different reasons that are adding to the relevance of the currency exchange rate as it continues to grow (Kituku, 2014). As a consequence of the many factors involved, the worth of one US dollar at the current exchange rate can be purchased for as much as N440.50. As a direct result of this, it will be harder for companies to maintain price levels that are comparable to those of their competitors.

Business Link

The relevance of exchange rates, devaluation, and depreciation are investigated, and their impact on the economic cycle is thoughtfully evaluated. Or, to be more specific, inside the framework of Nigeria. When the value of a currency increases, it can have either positive or negative consequences on businesses; conversely, when the value of a currency decreases, it can have negative repercussions on businesses if the company has a negative influence on the value of the currency. It is becoming an increasingly important question for the development of Nigeria's economy to consider how a high exchange rate would influence the operations of Nigeria's commercial enterprises. This is one of the factors that is leading to an increase in the amount of concern that people have about this. In the event that the value of the naira decreases in comparison to another currency, for example, this will have an immediate and direct effect on the price of items that are imported into a developing country. This will lead to a considerable increase in the overall cost of manufacturing the product, as well as a dramatic rise in the price of imported components as a direct result of the situation. As a consequence of this, the long-term profitability of an organization will be negatively impacted. If the value of the naira increased in comparison to other currencies, the cost of importing products would go down. Not only will there be a fall in the price of imported components, but there will also be a decrease in the entire cost of production. Nevertheless, the cost of conducting business in many countries has become more expensive as a direct consequence of this increase.

The fluctuation of the Naira

Importers have complained that the strengthening of the naira is reducing their competitiveness in their various markets, which has drawn public attention to the currency rate's volatility (Ndung'u, 2000). Particularly, this has helped bring currency volatility to the forefront of the public's mind. Therefore, studies into the effects of the aforementioned fluctuation in exchange rates on Nigerian business success are urgently needed. In an economy that relies heavily on imports from other nations, the

stability of the country's currency exchange rate is crucial to the availability of credit. Despite the evident attention exchange rate variations have gotten in Nigeria, not enough research has been done to assess how much exchange rate fluctuations influence the financial results of Nigerian firms and what may be done to reduce or regulate their effects. Despite the fact that the exchange rate of the Nigerian currency has been under intense examination, this has occurred.

Nigeria's main currency, the Naira, has experienced severe devaluation in recent years. Mostly, this can be attributed to the unpredictability of the local currency conversion rate. Directly as a result of this, the economy of Nigeria is suffering. Despite the much research done on different exchange rate regimes, their influence on macroeconomics and management, and the consequences of coping with currency risk on economic growth, the exposure of Nigerian businesses to exchange risk has received very little attention. To find a solution to this problem, action needs to be taken. This new event comes as a full and utter shock, given the size of the economy and the critical nature of maintaining a sound currency risk management strategy. Fixing this issue as quickly as possible is of the utmost importance. Because there hasn't been much research done on this subject in recent years, the existing body of information contains a significant gap. Because of this, there is a significant gap in the data that was obtained. We anticipate that by carrying out this research, we will be able to gain a better understanding of how shifts in the value of the naira impact the financial success of companies that are traded on the Nigeria Stock Exchange. This is because we will be able to gain a better understanding of the relationship between the value of the naira and the financial success of these companies. Because of this, we will be able to investigate the extent to which there is a connection between the worth of the naira and the monetary accomplishments of these businesses. Here at this location, we are going to carry out an assessment while bearing in mind the constraints imposed by our operations.

The value of one Nigerian naira has decreased relative to the value of the United States dollar from N151.51 in 2010 to N162.30 in 2011 to N156.15 in 2012, despite the numerous efforts that have been made by the government of Nigeria to maintain a stable exchange rate. In 2010, the value of one Nigerian naira was N151.51. Despite the fact that the exchange rate in 2010 was at N151.51, this event nonetheless

took place. During the course of the decade that began in 1990 and ended in 1999, the value of one naira increased from N8.0378 to N85.98. This increase occurred over the course of the decade. This ascent took place in a sequence of ever-higher stages. Since 1999, there has been a gradual but consistent fall in the value of the naira. This depreciation began in 1999. In 2013, one naira was valued at N158.05; in 2014, it was valued at N175.85; in 2015, it was valued at N232.40; and on December 31, 2016, the exchange rate increased to N300.757; in May 2017, it was valued at N365; in 2020, it was valued at N358.28; in 2019, the naira was valued at N360.05; in 2020, it was valued at N358.08 to a US dollar; and in 2021 December In addition, the average rate of exchange for one dollar to naira at the rate set by the Central Bank of Nigeria as of October 2022 is N416.18. This figure is accurate as of the month of October. As a direct result of this, the goal of this investigation is to explore and evaluate the impact that high exchange rates have on the business cycle in Nigeria.

Contribution of this Research

In terms of nominal gross domestic product, Nigeria is the world's 31st largest economy, while in terms of purchasing power parity, it is the world's 30th largest economy. Nigeria has the largest economy in Africa. According to a report published by the World Economic Forum in 2022, this nation has a GDP (PPP) per capita that is lower than that of South Africa, Egypt, or Morocco, but it has a GDP (PPP) per capita that is greater than that of Ghana and the Ivory Coast.

The behaviors of consumers, businesses, and governments are all subject to shifts in the value of the currency exchange rate, which can have a significant impact on all three groups. Their capacity for forming decisions can be swayed in some manner, shape, or form. These factors have an effect not only on the overall level of economic activity but also on inflation, trade deficits, and surpluses. Calculating the rates at which currencies are exchanged can be done in a number of different ways, each of which offers a different point of view.

Oil production fell by 8.3 percent while other industries grew by 4.4 percent. Agriculture (2.1% of non-oil sector growth) and services (5.6% of non-oil sector growth) were the two primary contributors. In 2021, Nigeria's GDP grew by 3.6%, a strong recovery from the 1.8% contraction seen the previous year. State and private consumption both contributed to GDP expansion on the demand side of the economy. There was a one percent rise in the per capita payout in 2021 compared to the previous year. As a result of a minor increase in receipts, the deficit, which the government had to borrow money to finance, fell to 4.8% of GDP in 2021 from 5.4% of GDP in 2020. Five point four percent of gross domestic product was the deficit in 2021. The deficit was funded at a rate of 5.4% of GDP in 2020. When the national debt hit \$95.8 billion in 2021, it was comparable to about 22.5% of GDP.

In 2021, the annual rate of inflation averaged 17.0%, which was significantly higher than the target range of 6-9% set by the central bank (the rate in 2020 had been 13.2%). The substantial increase in the cost of food that occurred at the beginning of the year, as well as the exchange rate pass-through, have both contributed to the recent upward trend in inflation. The Federal Reserve Board of Governors agreed in 2021 not to alter the policy rate from its previous level of 11.5% because it wanted to continue achieving its objective of supporting the ongoing economic recovery. As a direct result of the rise in oil revenues, the country's current account deficit shrunk from 4% of GDP in 2020 to 2.9% of GDP in 2021. This is a significant improvement. The nation's gross reserves reached a new high of \$40.1 billion in 2021, setting a new record. This was made possible by higher oil exports as well as the release of the SDR allocation of \$3.4 billion (0.8% of GDP). A previously inconceivable total was accomplished as a result of the collaboration of these two components. The rate of nonperforming loans as a share of total loans was 4.9% as of December 2021, which is lower than the regulatory threshold of 5%, which stands for nonperforming loans as a share of total loans. However, the ratio of adequate capital was 14.5 percent, which was more than the statutory minimum of 10 percent that was required by the legislation. Through the year 2020, the rates of poverty and unemployment remained relatively unchanged at approximately 40% and 33.3%, respectively.

The purpose of this study is to explain the effect that a high exchange rate has on the business cycle, and each of the variables that we have looked at is critical to achieving this broad goal. Gross domestic product (GDP) is the market worth of all final products and services produced in a nation over a specific time period and is measured in terms of money (GDP). There are many different types of domestic credit that can be granted by financial corporations to the private sector. Some examples of this type of credit include loans, purchases of non-equity securities, trade credits, and other accounts receivable that establish a claim for repayment. The value of all exports and imports as a percentage of total GDP is what is meant when we talk about "trade." The rate at which a nation's gross domestic product grows from one year to the next is one of the leading indicators of overall inflation.

The primary objective of this research is to conduct an investigation into how a high exchange rate affects the business cycle in Nigeria. This research will offer policymakers realistic ideas for enhancing the national economy. In addition to laying out the benefits and drawbacks of a strong currency exchange rate, this report will also lay out the benefits and drawbacks of a strong currency exchange rate.

Four Phases in a Business Cycle

The term "economic expansion" refers to the process through which a nation's Gross Domestic Product (GDP) increases or remains stable after having dropped. During this phase, a large number of economic indices, including consumer spending, income, demand, supply, employment, output, and company returns, all experience significant increases. The growth phase of the economy is when the economy reaches its peak, which coincides with the point in time when the GDP surges to its highest level. At this moment in time, economic indicators such as income, consumer expenditure, and employment levels are not expected to change. The next stage of the economy's decline is the contraction stage, which occurs when the peak GDP continues to stagnate and then begins to slide away toward the trough. As a consequence of this, production, employment, demand, supply, income, and various other aspects of the economy all suffer. The gross domestic product as well as other economic indicators will have reached an all-time low at this moment. During this period, economic growth is actually decreasing, which results in a stagnant economy. Additionally, there is a fall in the demand for products and services.

Strategic Business Decisions

Every company has to go through its fair share of successes and failures. In addition, each stage of the business cycle is characterized by its own unique set of traits. The four primary phases are referred to as the expansion, peak, trough/depression, and recovery phases respectively. A corporation must always be transparent about what stage it is currently operating in. In addition, because it is not feasible to accurately foresee the cycles, it is essential to be prepared at all times for a rapid shift in the cycles.

The company's stage in the economic cycle will also have a significant bearing on the choices it makes regarding its business operations. The phases of the trade cycle are taken into consideration when managers and business owners make strategic decisions for their companies. A company cannot remain unchanged; rather, it must continually adapt in order to compete successfully in today's market. Therefore, the firm will need to take on different activities depending on where it is in the cycle.

Therefore, if the present state of the economy is one of expansion, management has a certain ability to make the tactical choice to either expand the business or increase the amount of output they produce. But if the company is going through a hard patch, then expenditure needs to be reined in and policies need to be developed to reflect that. It's also possible that management will choose to discontinue certain product lines, either temporarily or even permanently. The trade cycle will have a significant role in such key company choices. Small businesses in Nigeria frequently expand their operations and become larger enterprises, which are advantageous to the economy of the country due to their function as a source of employment as well as innovation. The expansion of commercial activity is a fundamental driver of economic expansion. Import prices from other countries and the appeal of a company's products to consumers in other countries are both affected by fluctuations in the value of the currency exchange rate. This impacts the economy of the country and the firms working in that field.

To the extent that exports are hampered by a greater cost of doing business overseas as a result of a strong currency exchange rate, economic growth may be stunted. Overall aggregate demand has dropped because of rising demand for imports (and the corresponding decrease in domestic production). The comparatively cheap price of imports is the main reason behind this trend.

This study is important because it sheds light on the impact that Nigeria's high exchange rate has on the country's business cycle, pinpoints the source of the problem, and suggests solutions to the issue, all of which are necessary for the business cycle to continue fueling economic progress. This study also ensures that the issue can be resolved.

How Macroeconomic Shocks have affected the Nigerian Economy

Since the early 1970s, the economy of Nigeria has been plagued by recurrent and severe crises, which have faced the nation's policymakers and economists with a difficult problem. At each and every new turn in the story, attempts are being made to create and implement suitable policy solutions. There is no way to avoid the conclusion that the economy of Nigeria has, at various moments in its history, experienced both times of expansion as well as times of contraction. The decade of 1970s saw the discovery of massive quantities of wealth in the form of crude oil, which was a substantial contributor to the expansion of the economy. However, by the time period of 1981–1985, dwindling oil revenue caused the economy to contract, which in turn resulted in a dramatic decline in the standard of living of Nigerians. This occurred in Nigeria. During this time period, the economy of Nigeria is said to as having gone through a "lost decade." According to Iwayemi A &fowowe, B (2011), "the cycle of oil price booms and precipitous decline and the associated transfer problem, in terms of the net resource outflow associated with debt repayments, triggered profound changes unparalleled in the history of the economy." (The cycle of oil price booms and precipitous decline.) Because the effects of the time that came before it persisted over into the time that came after it, the succeeding times were not as unlike one another as you might think they would be. Macroeconomic indicators hint at catastrophic economic issues. To be more specific, there were significant shifts in the rates of inflation and unemployment, significant swings in the gross domestic product (GDP), rising quantities and compositions of government spending, and sluggish development in domestic output. All of these factors combined to create an unstable economic climate. Some of the elements that are contributing to the problem include a protracted fiscal deficit, a drop in the conventional agricultural output, rural-urban drift, and other challenges. Various contributing variables include other issues. Several external and endogenous variables (changes) may be responsible for business cycles in Nigeria, which may have contributed to these findings. There may be additional factors that contribute to these results. These results could also be attributable to a number of other factors. View the data in the table beneath.

Table 1:

Topology of Shocks for Nigeria

| S/No | Shock | Origin | Immediate |
|------|-----------------|--------------------------------|-----------------------------|
| | | | Consequence |
| 1. | Crude Oil Price | The OPEC decision to | The Surge in the |
| | | double oil prices in 1973 | Economy |
| 2. | Lower crude oil | 1979 witnessed another | There has been a |
| | demand | spike in the price of crude | worldwide economic |
| | | oil. | downturn. |
| 3. | Foreign Debt | Position of the Fiscal Policy | Funding Economic and |
| | | | Social Initiatives |
| 4. | Misguided Law | insufficient leadership in the | Instability in the |
| | Enforcement | administration of the whole | Macroeconomic |
| | | economy | Environment |
| 5. | | Rural-Urban Movement | Puts a strain on society's |
| | | | basic support systems |
| 6. | Terms of Trade | Currency Overvaluation | Immizerization growth |
| 7. | Economic | Structural Adjustment | Mixed grill |
| | Reorganization | Programs | |
| 8. | Institutional | The Transformation of an | The privatization of state- |
| | | Economy Based on State | owned businesses and the |
| | | Control into One Based on | subsequent loss of jobs |
| | | Market Forces | |
| | | | |

Author's Synthesis

These include the crude oil price shock, which resulted in a boom in the middle of the 1970s, the reduced petroleum products demand shock, which resulted in a worldwide downturn regarding the rises in oil prices in 1979, the international debt shock, which resulted in money problems in the implementation of socio-economic development programs, and stochastic shocks, which were the result of an insufficiently timely, appropriately directed, and appropriately scaled policy response. Given the range of policy alternatives at one's disposal, it is self-evident that the administration of such an economy, which is subject to a myriad of shocks, calls for efficient management instruments. Through the implementation of a variety of macroeconomic policies, including those pertaining to fiscal spending, monetary policy, trade, and income, Nigeria has made an effort to reverse the negative effects that the country's economic situation has had on the welfare of its population. Programs were implemented with the intention of achieving important goals such as increased employment, stable prices, rapid and sustained economic expansion, and a healthy trade balance. Achieving these goals was one of the reasons why the programs were so successful. On the other hand, erroneous and insufficient data, together with a focus on short-term profits at the price of long-term progress, could have been the root cause of Nigeria's volatile macroeconomic conditions. In response to the many shocks that the country of Nigeria was subjected to, the government there made a number of different policy decisions, the majority of which took the shape of economic policy measures. These policy options include the Stabilization Policy, which was in effect from 1981 until 1983; the Structural Adjustment Program, which was in effect from 1986 until 1992; the Medium-Term Economic Strategy, which was in effect from 1993 until 1998; and the Economic Reforms, which were in effect from 1999 until 2007.

The current administration continues the latter practice. Understanding the country's small size and trade openness is essential when doing a macroeconomic analysis of a growing economy like Nigeria's. In other words, they are powerless to affect global output or prices. So, domestic macroeconomic policies get thrown off course from economically sustainable growth due to exogenous shocks. Given the difficulty in anticipating and mitigating the consequences of these shocks, it is vital that researchers examine how different shocks might shed light on the root causes of macroeconomic oscillations and, by extension, the business cycle phenomena that happens in Nigeria. In what follows, this study will identify the most relevant theoretical framework before moving on to the next step, which is the development of a workable model.

Statement of the Problem

The economy of Nigeria has occasionally suffered from the quick depreciation of the Nigerian Naira. Commercial vulnerability on exchange volatility in Nigeria has received little attention, despite studies on exchange rate regimes and their effects on managing foreign exchange risk and macroeconomic management. This study assessed how changes in exchange rates affected the business cycle.

Exposure to changes in exchange rates, transaction risk, and currency rate risk all have negative effects on operating cash flows and the value of a company. The fluctuations in fair-value revenue are greater than those in cost-based revenue. Gains and losses on unrealized financial assets contribute to increased earnings volatility. Because of their varying degrees of potential for an explanation, not all indicators of income volatility may be considered risk proxies. Investors will allocate capital in an inefficient manner, which will raise the cost of capital for banks. The reporting of income volatility will drive up the cost of capital in the insurance industry, make it more difficult to forecast earnings, and prevent the industry from providing investors with information that is forward-looking (Dickinson and Liedtke, 2004). The exchange rate can move quite a bit from day to day. The value of various currencies drives the growth of international trade. Nigeria is required to comprehend the gravity of the issue and provide a response. In order to fill a vacuum in our knowledge, this study investigates how Nigeria's high exchange rate has impacted the country's business cycle.

Purpose of the Study

The purpose of this research is to identify, within the framework of Nigeria's economic cycle, the causes behind the country's relatively high exchange rate. Some examples include GDP, inflation, market access, interest rates, currency valuations, international trade, and central bank autonomy.

A company's bottom line can be affected by fluctuations in the value of its home currency because of the higher or lower cost of importing supplies and the value placed on those materials in foreign markets. In Nigeria, the price of imported goods and raw materials has increased as a result of the naira's high value. There's no mystery there. Because of this, both customers and store owners are feeling uneasy. The smooth operation of the foreign exchange markets is crucial to the achievement of international trade, investments, and monetary transactions. Businesses that operate internationally can easily get the foreign currency they need by exchanging their existing currency holdings or bank deposits for the desired amount on these exchanges.

This article will argue that the Central Bank should place stringent limitations on the acquisition and sale of foreign currency in order to fulfill the aims of the policy. These goals include achieving economic growth and reducing unemployment. In the long run, this will help the value of the Naira rise over the course of an economic cycle by making it simpler to calculate the proper exchange rate. This will take place over the length of an economic cycle.

Research Question

From the analysis of the problem statement, the researcher will strive to answer the following research questions:

- > What impact does a high exchange rate have on firms that are based in Nigeria?
- > What had the monetary authorities done to reverse the turmoil?
- ➤ How can the Nigerian currency be valued?

Hypothesis

Null

There is no link between Nigeria's business cycle and a high exchange rate.

There is no link between a high exchange rate and economic growth in Nigeria

Alternative Hypothesis

There is a link between a high exchange rate and the business cycle in Nigeria

There is a link between a high exchange rate and economic growth in Nigeria

Significance of the Study

It is anticipated that gaining an understanding of how changes in the exchange rate affect Nigeria's business cycle will greatly improve the economy of the country. Because it clarifies the dollar-naira link and the study's magnified impact on the Nigerian economy, financial officials in Nigeria will benefit from this research. In addition, the research will have an amplified impact on the economy of Nigeria. Because of the findings of this study, the government of Nigeria may decide to make some changes to its monetary policy. These changes would have the dual effect of improving both the competitiveness of Nigeria's homegrown businesses and the reserve levels of the country. Because of this, it is reasonable to predict that native businessmen and women, SMSs, and various other economic stakeholders will be among the key receivers of the assistance. In addition, the report lays the groundwork for further research into the ways in which shifts in exchange rates affect a variety of macroeconomic parameters. The findings of this study will contribute to the current body of literature and will assist policymakers in Nigeria in coping with the implications that currency fluctuations have on the growth of indigenous businesses.

Limitations of the Study

The majority of research programs are characterized by their incorporation of constraints, which are components that restrict the number of studies that may be conducted. As a direct consequence of this, the research can't be carried out due to limitations such as an absence of sufficient financial resources and supplies. This study will be divided into five chapters, and each of those chapters will analyze not only the effects that the high exchange rate has had on the business cycle in Nigeria but also the benefits and drawbacks of conducting business in the country. As a direct result of this, there have only been a small number of academic and field investigations conducted on the subject. In addition to this, acquiring the requisite information and knowledge might be a difficult task. The data set was kept and managed by the World Bank, which is where the information came from.

The study is going to take place over a span of fifty-one years (1970-2020). The high exchange rate business cycle in Nigeria and the impact that it has on the Nigerian business cycle are the only topics that will be covered in this section of the study. The time frame that will be necessary to complete this research as well as the challenges that will be involved in gathering data that is accurate and precise are both significant obstacles.

Definition of Key Terms

Arbitrage: Arbitrage refers to the practice of buying and selling the same item (such as a stock, cash, or commodity) in different markets or in derivative forms at the same time to profit from price discrepancies.

Buying rate: The buying rate refers to the price at which a trader would purchase a predetermined quantity of a different currency. After that, they would sell the currency to an individual or a firm at the "selling rate" they had determined.

Currency: The term "currency" refers to anything that is generally acknowledged to have value as a medium of exchange in order for it to be exchanged for other products and services.

Exchange rate: conversion of one currency's worth into another for the purpose of making purchases.

Fisher effect: Irving Fisher, an American economist, is credited with the development of the Fisher Effect, an economic theory that describes the connection between inflation and real and nominal values.

Fluctuation: a fluctuating rise and decrease in the quantity or amount; an example of variety the

"Variations in the yearly numbers might be attributable to a number of different elements"

Foreign Exchange Market: a form of the stock market in which the currencies of several countries can be bought and sold by investors.

Inflation: Inflation refers to the sustained increase in prices over a given period of time. Inflation is typically evaluated in broad terms, such as the average rate of price increase or the average rate of increase in the cost of living throughout a country.

Interest rate parity: The difference in interest rates that exist between two nations should be proportional to the difference in value that exists between the forward exchange rate and the spot exchange rate.

Money: a medium of exchange that is currently in circulation, typically in the form of coins and banknotes; jointly, coins and banknotes

Profit: a rise in one's net worth, particularly expressed as the difference between the amount earned and the amount spent on the acquisition, operation, or production of something.

REAL rate: The term "real interest rate" describes an interest rate that has been adjusted to account for inflation.

Reserves: are assets that central banks have access to and can employ to manage the balance of payments and their positions in the foreign exchange markets.

Selling rate: This is the rate to be applied to sell the foreign off domestic currency depending on the transaction.

Spot foreign exchange market: This is a market for the immediate exchange of currencies.

Tariffs: A tax placed on goods that one nation imports from another.

CHAPTER II

Literature

Exchange Rate

The Exchange rate is the word commonly used to refer to the value of one currency expressed in terms of another. An example of an exchange rate is the price at which one currency may be purchased with another currency at the present time (Jhingan 2011). (Obadan 2006) argues that the exchange rate is a critical component of monetary policy that should be used to guide the implementation of economic policy more broadly. Currency exchange rates are crucial to the global economy because they encourage exports while discouraging imports, they keep the balance of payments in the black, they bring countries with vastly different pricing structures closer together, and they make it easier for businesses to compare prices on a global scale. Changes in the volume and content of fiat money in the 1970s. Whenever two countries engage in a financial transaction, the exchange of one country's currency for another is a key component. Foreign exchange markets are regulated by a complex network of banks and other financial institutions. The value of one currency expressed in terms of another is known as the currency exchange rate.

The value of the exchange rate between the naira and the euro can be illustrated by looking at how many nairas are needed to buy one euro. The price of one euro cent in Nigerian naira is another illustration (for example, the Euros used in the Republic of Ireland).

One must think about monetary policy when deciding whether or not to engage in foreign trade (Obadan, 2006). To this end, the nation's monetary policymakers employ a variety of tools from the macroeconomic management toolkit to strike a balance between domestic demand and supply over the medium term. To this goal, we use the term "internal balance" to refer to the level of economic activity that is in line with the targeted inflation rate. Alternatively, external deficit funds or volatile currentaccount funds may be linked to long-term capital inflows. It is well-known that a country's overall inflation rate is significantly affected by the exchange rate for its currency. The local currency exchange rate is the same as that of any other currency. In contrast to a set base date, which uses a single reference currency as the basis for a currency's value, an effective exchange rate takes into consideration a basket of other currencies. Each currency has what is called a "base date" that is used to calculate its current value. This is done to make calculating the worth of the money easier. Each of these calculations yields a value or metric that is tied to the particular currency employed and the relative weighting of the numerous factors considered (weight). IMF's Military Exchange Rate Model (MERM) forms the basis for the Central Bank of Nigeria's effective naira exchange rate indicators (IMF).

Because of the current status of the global economy, (Momodu 2015) argues, aiding developing countries and trading partners in overcoming poverty is of the utmost importance. Important governmental decisions, such as the foreign currency strategy of the regime and other administrative problems, are also influenced by political ideology. According to Momodu, the definition of an exchange rate is "the rate at which one country's money is traded for the currency of another" (2015). The value of exchanging one country's money for another is most commonly determined by reference to exchange rates. To find this number, simply convert one currency to another. In any case, there are a number of other methods that can be employed. It is essential to bear in mind that the current policy or regime surrounding currency rates has a substantial effect on the value of the naira. Purchasing power, the balance of payments, the price of goods and services, import structures, export profits, government revenues, and the number of foreign reserve holdings are all affected by fluctuations in the rate of foreign monetary activity. Investigated the impact of unforeseen events on the value of the Nigerian currency and the country's exports. Vector-altering strategies and data from Nigeria were used to investigate the J impact curves.

Findings from his study indicate that the Naira's depreciation follows cycles in the trade deficit. The two are clearly connected in Nigeria. Despite this, a recent analysis revealed that a change in the trade balance is likely to occur within the next few months. However, the J-curve hypothesis recommends using the experimental study to probe the cyclical nature of business.

The results of the empirical research indicate that changes in the value of one currency relative to another have an effect on trade. Any time there is a dramatic change in the value of the currency exchange rate, the current situation improves virtually instantaneously. The nation's trade balance will worsen generally but improve after a period of time, and prices will rise rapidly in reaction to the deterioration of the situation. To judge by Nigeria's trade balance, which is linked to the actual devaluation the country has undergone, the J-curve hypothesis does not appear to be correct. As a result, the J-curve hypothesis, which states that a country's currency will rise in value over time, is taken into account. Because of this, a short-term J-curve estimate for Nigeria cannot be made at this time.

Inflation's impact on the value of currencies presents a major difficulty in the administration of economic policy on a worldwide scale, claim Bada et al. (2016). That is one of the biggest problems with overseeing international economic policy. This is one of the biggest obstacles that must be overcome in order to successfully manage international economic policy. Countries that are still developing or emerging from underdevelopment are disproportionately affected by this problem. When the value of a country's currency fluctuates, it can have a destabilizing effect on the economy and lower the country's ability to compete internationally. Changing the currency rate is avoided whenever possible by publications and governments due to the potentially disastrous effects on the economy. Changing the exchange rate will have an effect on the value of the currency, which is predicted to have these consequences. Having currencies that aren't in sync with one another can have negative consequences, and this is a truth that is commonly acknowledged.

Nigeria's Exchange Rate Determinants

Changes in the rates of exchange between different currencies are a significant issue that can make or break international business transactions. Omojimite et al (2010) state that international trade shifts, institutional reforms, and manufacturing sector shifts are to blame for Nigeria's economic fluctuations. These factors are somewhat to blame for the economic instability that the country is currently experiencing. In one way or another, each of them has been crucial to the expansion of the national economy over the past few years. According to Englama et al (2010), Nigeria's real currency rate has been strongly influenced from the outside. This is due to variations in the worldwide pricing of agricultural commodities and oil. The export earnings and foreign currency reserves of Nigeria are highly sensitive to the cost of oil and other agricultural commodities. These outside forces have had a significant impact
on Nigeria's real exchange rate. Englama et al (2010), argued that actual exchange rate fluctuations were lower when the economy was reliant on agricultural exports because agricultural commodities were less volatile. This is because price fluctuations among agricultural goods were often less. To rephrase, actual exchange rate volatility was common when the economy relied primarily on agricultural exports.

Although the real exchange rate changed by only 0.14 percent between 1970 and 1977, that was enough to radically alter the established order. In the years between 1970 and 1985, the value of the naira fluctuated by 10% as a result of trade shocks brought on by changes in the worldwide price of oil. Many trade shocks resulted from swings in the global price of oil, leading to this.

According to (Iyoha and Oriakhi,2002) the real currency rate swings that occurred during this time period were brought on by the extensive expenditure that the government did on development projects. These unforeseen events were the cause of genuine swings in the currency exchange rate. After the unanticipated windfall came to an end, the government was compelled to come up with additional funds in order to continue paying its expenses. Following his analysis of the data, he arrived at the conclusion that expansionary monetary and fiscal policies were contributing factors to rising inflation, which in turn contributed to changes in the real currency value. Following a thorough examination of the material, he arrived at this result. In 1986, Nigeria began to undertake a structural adjustment program, more commonly referred to as the SAP. This was one of the variables that began to impact the trajectory of Nigeria's real exchange rate at that time. Alternately known as the Structural Adjustment Program (SAP), SAP stands for the Structural Adjustment Program. Utilizing a policy that allows for a variable nominal exchange rate is a key notion underpinning this approach. Evident changes in the nominal exchange rate of the naira emerged over the course of the currency's ongoing flotation process.

During this time, the value of one currency relative to another fluctuated more widely than usual due to this trait. According to findings published by Englama et al (2010), the real exchange rate of the nation's currency climbed by an annualized rate of around 25% between the years 1986 and 1992. Between the years 2000 and 2006, however, this number dropped to 4.5 percent. Favorable trade conditions, lessening the government's budgetary dominance, a monetary policy driven by increased

independence, and currency fluctuations are only a few of the issues that need addressing.

Volatility in the High Exchange Rates, Export Activity, and Economic Development

When there are fluctuations in the market, it has been demonstrated that selling goods internationally is a more hazardous and unpredictable endeavor. As a result, businesses that produce goods destined for export should make an effort to forestall rises in the selling price in order to safeguard their revenues. Despite the fact that it has been observed that changes in exchange rates get a positive influence on export commerce in nations that are members of the European Union, the International Monetary Fund (IMF) came to the conclusion in 1984 that fluctuations in exchange rates are associated with negative macroeconomic phenomena such as inflation.

Depreciation, which is defined as a reduction in the value of one currency relative to another, results in a reduction in the cost of dwelling in the host nation. This is because the value of the local currency has been reduced. Ford and Stein found evidence that lends credence to the adoption of an increasingly inward strategy in a weak host nation.

According to (Srour (2006), altering foreign exchange rates and regimes are one explanation for the diversification of export bases that developing nations have undertaken. According to a report published by the World Trade Organization in 2010, this, in turn, increases production, employment, income, and overall economic growth in the surrounding area. Because of this, the strength of the naira in relation to that of other currencies has an effect on the growth of Nigeria's gross domestic product (GDP) as well as the country's exports. To be more particular, the works of (Adubi et al 1999).

Nigeria's Exchange Rate and Capital Control

Political concerns have contributed to the development of Nigeria's economic policies, especially those policies dealing with the currency rate and capital control, as evidenced by a study of prior research and statistics. Political factors have been taken into account while crafting Nigeria's economic policies, proving this to be the truth. This is the situation as a result of the fact that political factors have been taken into account in the process of formulating Nigeria's economic policy (Akinlo and Onatunji, 2020). Instead of responding to the economic realities, officials choose to represent the preferences of their political paymasters in the policies that they carry out in response to political demands. This is done in lieu of responding to the realities of the economy. This is done as an alternative to reacting to the truths about the state of the economy. Since Nigeria's independence, the country's central bank has implemented a number of policies related to the currency rate and capital control measures that are the direct result of political preferences or expediencies. Limits on entering and leaving the country with monetary resources are part of these regulations. The political atmosphere of the age in question is almost solely responsible for the specific policy regimes and laws governing the country's foreign exchange markets, which are managed in different ways by the many government regimes in power there.

According to the information that was presented earlier, it is to be anticipated that the policies that govern currency rates will be influenced by a wide variety of political concerns, one of which is the date on which elections will take place. Specifically, it is anticipated that the date on which elections will take place will have an effect. The real exchange rate affects a wide range of economically significant variables, including purchasing power, export costs, the overall price level, and real wages. Because some voters consider these summaries as criteria in deciding whom to vote for as a leader, their combined importance in determining who wins elections cannot be overstated. In reality, governments tend to raise their currencies' values right before elections, putting off any depreciation or devaluation until after the vote has been counted (Kaltenbrunner and Painceira, 2017). As a result of the political unpopularity of a fall in national buying power brought about by devaluation, governments may opt not to devalue the currency for reasons that have nothing to do with economics. Devaluation would lead to a loss of purchasing power.

The kind of political leadership that is currently in place in Nigeria and the manner in which they carry out their duties have both played a part in deciding the policies and controls that have been put in place regarding the exchange rate and capital. In addition, the manner in which they carry out their duties has also played a part in deciding the policies and controls that have been put in place. The World Bank and the International Monetary Fund (IMF) are ardent proponents of further economic

liberalization, and pro-Western governments and administrations have a higher predisposition to follow this global trend. International Finance Corporations like (IMF) Fund and the World Bank both endorse this trend, which is taking place all around the globe (IMF). During the time that these systems are in place, the exchange rate is either left unfixed or is determined by market forces. These two choices are both suboptimal. Specifically prominent examples were the Chief Olusegun Obasanjo (1999-2007) and General Ibrahim Babangida (1985-1993) regimes (1999 to 2007). In contrast, a fixed exchange rate system is frequently chosen by governments that are not wholly anti-Western but also do not support the current trend toward economic liberalization. The reason is that fixed exchange rates are more stable than floating ones. Because of the inflexibility of fixed exchange rates, economies cannot respond to external shocks by changing course. This is why this is happening. As an example, consider the draconian measures taken by General Sani Abacha during his presidency (1994 to 1998).

The Business Cycle in Nigeria

Kaltenbrunner, A., & Painceira, J. P. (2017) conducted a DSGE estimation for the Nigerian economy. DSGE stands for dynamic stochastic general equilibrium. It is quite possible that this particular DSGEM was one of the very first to be produced in Nigeria. This study proposes a simplified dynamic stochastic general equilibrium (DSGE) model of the Nigerian economy in an effort to assist in the decisions that the country would make regarding its monetary policy. The authors make use of a methodology that is known as the Vector Autoregressive (VAR) model so that they can arrive at their estimates. Inflation and changes in currency exchange rates were found to be the primary factors influencing price changes. Real output volatility was revealed to be the primary driver of interest rate volatility.

A DSGE-inspired Dynamic Stochastic General Equilibrium (DSGE) model of the Nigerian business cycle was constructed by Alege, who built on the work done by Olekah and Oyaromade (2007). Researchers conducted studies using the Bayesian technique and Vector Auto regression analysis between the years 1970 and 2004 to learn more about the factors that cause economic cycles and the implications of these findings for policy evaluation. The results of this research demonstrate that the business cycle in Nigeria is sensitive to real shocks in the same way that it is sensitive to nominal shocks. In other words, the sensitivity extends both ways.

The research conducted by (Alimi and Atanda 2011) also included an investigation into the ways in which globalization, the business cycle, and economic expansion have influenced Nigeria. They used a study of the correlation between these two variables in order to apply an autoregressive model to the data for the annual period. The study focused on the relationship between the variables. This occurred in spite of the fact that investments made in other countries have a tendency to follow cyclical patterns. It was discovered that business cycles had a positive but insignificant effect on economic growth in Nigeria. On the other hand, it was discovered that globalization had a positive and significant effect on economic growth. According to the results of the study, globalization also contributes to the growth of the economy, which is a positive development.

The importance of International trade on Business cycles

Because of limited resources and individual diversity, no nation is capable of providing all of the goods and services that are required by its population. As a result, international trade is an extremely important economic activity. Because of the nature of this economic relationship, countries are required to create revenue through the export of products and services in order to pay for imports from other countries (Adeleye et al 2015). The literature on finance has demonstrated the importance of international commerce to economic well-being and growth over the long term of a nation has been shown. As part of the study of international trade, one of the themes that are researched is the movement of industrial forces across international borders. One such topic that is investigated in this area is the factors that both cause and are affected by international commerce in goods and services.

Therefore, when we talk about international trade, we are referring to activities such as the trading of products and services across international borders as examples of what we mean by the term "international trade." In other words, when we talk about international trade, we are talking about international commerce. They advocate narrowing the scope of international trade-related activities to just a select few nations. The domestic and global production and consumption of all products and services were factored into the growth and personal economic income calculations. This was done for all forms of monetary gain in the economy.

International Trade and Exchange Rate Fluctuation on Business Cycles

Because of the existence of uniform pressures, it is impossible for any nation to remain economically independent. For this reason, the exchange rate is a critical part of the economic trade that takes place between nations. During an examination of the condition of this metric, one of the primary metrics that should be taken into consideration is the present standing of a nation's balance of payments (BOP). It is possible to make use of it as a nominal anchor in order to keep prices stable when it is applied effectively, and this may be achieved by employing it in a suitable manner (Oladipupo and Onotaniyohuwo, 2011). The interest rate, inflation, unemployment rate, financial provision, and a wide range of other factors are some other examples of economic indicators. Findings like this highlight the importance of the exchange rate to a country's overall economy, which in turn promotes international commerce. Due to this improvement, it is now possible to do a precise comparison of products traded across national lines. This is because the exchange rate connects the two countries cost of living. To rephrase, one of the advantages is that it aids in narrowing the price gap between the domestic market and the international market. Currency exchange rates play a significant role in a country's overall balance of payments because of their role in that country's imports and exports. Governments require a plan for the currency exchange rate to ensure they can fulfill their macroeconomic goals, such as maintaining a healthy external balance as shown by their balance of payments. This will increase the likelihood that they will succeed in their endeavors. Unless they accomplish this, they will not succeed in what they set out to do. Adhering to this strategy will bring them closer to their goal (BOPs).

The value of Nigeria's currency in international markets is heavily influenced by the rate at which the country's currency is exchanged for other currencies. The nation's central bank is in charge of these regulations. Another component that has a major effect on the process is the currency rate. Because the exchange rate affects the price, profitability, resource allocation, and investment opportunities of internationally traded goods and services in both direct and indirect ways, this is the case. Improving the balance of payments and business performance is dependent on one's capacity to maintain a stable exchange rate. Since the Bretton Woods fixed exchange arrangement collapsed in the 1970s, currency markets around the world have become more unstable. In the decades following the dissolution of the Bretton Woods agreement, this occurred. This happened in the decade that began in the 1970s. Concern over the rising volatility of exchange rates has been expressed by businesspeople and politicians from all around the world over the past several years. Public and private expressions of this worry have been made (IMF, 2019). Due to its ubiquitous nature, this trend has spread over the majority of rising countries, especially those whose economies are founded on a single culture, like Nigeria's. Since the cost of importing commodities is lower than the cost of manufacturing items domestically, the industrial sectors strongly recommended that Nigerians place their total reliance on imports rather than on the country's production rather than on home production. This is according to (Kalu and Anyanwaokoro, 2020).

International transactions carry a higher degree of danger due to the volatility of exchange rates. For this reason, risk-averse merchants are compelled to reduce their export-import volume and redirect the goods produced to domestic markets. For those unwilling to take any chances, higher exchange rate volatility means higher expenses and less foreign investment.

The ups and downs in global oil prices have the potential to have a devastating impact on Nigeria's economy (Omojimite and Akpokodje, 2010). Therefore, exports and imports are the backbone of international trade.

Control Over Capital flows and Exchange Rates in Nigeria

A look back at the literature and the numbers shows that political decisions have influenced the evolution of Nigeria's economic policies, especially those that have to do with macroeconomic variables and capital management. Why? Because political considerations have played a part in shaping Nigeria's economic policy (Akinlo and Onatunji, 2020). Instead of adapting policies to meet economic needs, elected officials often use them as symbols for the agendas of the donors who fund their campaigns. This is done instead of reacting to the economy as it currently stands. Since Nigeria's independence, the country's central bank has implemented several policies affecting the currency rate and capital control measures, some of which can be traced back to political preferences or expediencies. Indeed, the varying policy regimes and laws governing the country's currency rate are virtually exclusively the product of the political conditions of the time in question. Because of the country's many government regimes, the management of the country's foreign exchange markets is very volatile and inconsistent.

It is common practice for governments to boost their currencies immediately before elections, with plans to deflate them after the results are in (Kaltenbrunner and Painceira, 2017). For reasons that have nothing to do with economics, governments may decide not to devalue the currency because of the political unpleasantness of a decline in national purchasing power brought about by devaluation.

In Nigeria, the policies and controls on the currency rate and capital flow have been determined in part by the type of political leadership that is in place and the way in which they carry out their tasks.

Balance of Trade

The phrase "balance of trade" is one that is used with the aim of determining the current scenario that the economy is in at the present time using the intention of determining the current state that the economy is in at the present time. This is one of the ways that the term is put to use in many contexts. The term "balance of trade," also known as "trade balance," "international trade balance," "balance of trade," and "net exports," is the one that is used to refer to this subject the most often. These expressions are all connected to the same concept (Kenton and Boyle, 2020). The balance of trade is the difference between a country's exports and imports of commodities and services.

Since every transaction that takes place on a worldwide scale is documented, the balance of payments is the most critical part. Since the customs agency is involved in the movement of all products and services, the calculation is performed in a straightforward and easily understandable manner (Amadeo and Brock, 2021). The impact of a trade imbalance on one economy is the same as that on all other economies that trade with that country. When a country's exports exceed its imports from that country, the trade balance for that country is positive. In contrast, a country is said to have a negative trade deficit or trade balance when its imports exceed its exports. A negative trade balance is another name for this. A trade balance is another possible representation of this concept. When protectionist policies are in effect, a trade surplus is the only thing a government should want to avoid (Kenton and Boyle, 2020). As a direct outcome of trade imbalances, countries with the means to import may reap financial benefits and reinvest those gains in order to boost their economies.

The Importance of a Balance Of Trade in Business

The balance of trade quantifies the value of all merchandise and services traded between two countries during a given time frame. The amount of a country's trade surplus or deficit in a system of freely floating exchange rates is based on the supply and demand for money and the totality of the country's financial interactions with other countries (Lioudis, 2021). The balance of trade, or the difference between a country's exports and imports, and the value of its currency are both affected by the global market for all financial operations and the supply and demand for a particular currency. The trade balance is affected by factors such as tariffs and limits on both international and domestic commerce, as well as the cost and availability of land, labor, equity, taxation, and incentives.

The information was then analyzed using an OLS (Ordinary Least Squares) Regression. The results show a robust association between the value of a country's currency and its trade surplus or deficit. Olayungbo (2019) did a similar investigation of Granger's assumptions regarding proportionality.

Impact on Nigeria's economy, commerce, and foreign exchange reserves, and their causes. The analysis, which used quarterly data from 1986Q4 through 2018Q4, accounted for seasonal changes. Oil prices and the amount of the government's foreign currency reserves are the only two things that are found to be constants in the report.

There was a similar rise in the prevalence of co-utilization. Integration's Granger found that fluctuations in oil prices have a short-term impact on a country's foreign currency reserves.

Theoretical Review

Trade Theories

The basic objectives of trade theory are to get an understanding of the current trend in international commerce, how it impacts regional economies, and the type of government action that is essential to enhance an economy at the national level. Adam Smith was an influential thinker, philosopher, and economist who proposed a philosophy of globalization. Many economists credit his work and consider him the "father of modern economics." It was the year Joseph Smith published "The Wealth of Nations," one of his most famous works (1776). Nothing of lasting economic value has emerged from Nigeria, and few new ideas are widely implemented there. For example, the widespread notion that economic inequality can be mitigated and parity can be promoted through global trade has led to the adoption of methods that prioritize short-term growth at the price of long-term sustainability. If Nigeria wants to reap the benefits of its trade policy, the country, which has both a big supply of fertile land and a large labor force, must give agriculture a high priority. Since the early 1970s, when oil prices began to rise, the government has mostly abandoned agriculture and industry. The government and business sector's singular focus on oil and gas has deprived other industries of the support, resources, and managerial expertise they require to thrive.

As a result, the country's primary industry can't compete on a global scale, and the country itself becomes an attractive market for companies based in other countries. Waste, graft, low production, and unchecked foreign influence define Nigeria's oil industry (Hassan et al, 2002). As a result of the country's currency's virtually total reliance on the earnings from its oil exports, it is very susceptible to swings in the cost of oil on international markets.

The country also has an abundance of various types of solid minerals. To put it succinctly, the economy placed an abnormal amount of faith in the primary industry, which encompassed mining and environmentally sound agriculture. The economy has made only a little progress due to a number of issues, including a dearth of adequate employment opportunities, a shift toward more positive attitudes, a reorganization of value, and a more equitable distribution of economic gain.

Factor proportion theory suggests that Nigerians have spent disproportionately large sums on Western European-origin digitally connected goods. And this is despite the fact that very few agricultural products leave the country. From 1980 to 1985, machinery and equipment made up almost 40% of Nigeria's annual imports, as shown by the country's Import Profile. The data presented here were collected between 1980 and 1985. For instance, out of a total of \$3.067 million earned from foreign exchange,

\$2.755 million, or 89.8 percent, was spent on equipment, spares, and raw materials. The total is an increase of \$3,344,000,000, or 93.3 percent, from the previous year's total of \$3,584.1,000,000, allotted specifically for industrialization via technology transfers.

Theories of the Currency Exchange Rate PPP Stands for "Purchasing Power Parity"

Capacity to Make Purchases The economic theory of parity involves making comparisons between the currencies of various countries by using a "basket of products" method. It is a method that takes into account the disparities between the rates of inflation experienced by various nations in relation to the purchasing power of their respective currencies. To put it another way, if there was a persistently high rate of inflation, it would cause the cost of locally manufactured commodities to rise in comparison with those of other imported equivalents. Because of this, there would be a higher demand for goods made in other countries, and as a consequence, there would be a higher demand for currencies from other countries.

As a direct consequence of this, the worth of the legal tender would decrease as a consequence of the growing demand for alternative forms of cash. Foreign currencies would become cheaper if the value of the national currency decreased. Therefore, this would lead to higher foreign exchange fees. As the price of the currency fluctuates, factories will use less of their foreign inputs.

An increase in the costs of manufacturing nearly invariably results in an increase in retail prices, a decline in output, fewer jobs (or jobs lost), reduced profits, or the complete cessation of activities at the base of the economic pyramid. If you intervene in the exchange rate when it is at its lowest point in the strata, you might see an increase in output, an improvement in employment, a bigger margin of profit, or even the introduction of a new manufacturing line. These are but a few of the many possible results. Currency exchange rates are strongly influenced by inflation rates because of the impact they have on the purchasing power of a nation's currency.

The Theory of the Portfolio's Overall Balance

Experts agree that the monetary base, domestic bonds, and foreign bonds are the three main components of a well-rounded investment portfolio. This assumption underpins the rationale for the concept of portfolio diversification. In keeping with Branson's theory (1975:264). When the requisite percentages of each type of investor own these assets, the market exchange rate is said to be in equilibrium. If businesses are pleased with how their financial assets are performing, the government's budget deficit will show up in the current account balance of the portfolio analysis. The government was unable to sell bonds to investors, which led to a negative balance of payments even if the bonds' total value remained unchanged. On the other hand, the aggregate value of government bonds remained unchanged.

Market adaptation or capital transactions are highlighted as important in the portfolio balance theory's view of how exchange rates are established. In contrast to monetary theory, however, it details how other factors, such as supply and demand, contribute to currency exchange rate variations. It is expected that people will pool their resources into a unified system for the purpose of diversifying bond portfolios that include both domestic and international holdings. For this purpose, only foreign government-guaranteed obligations and liabilities issued by a foreign entity other than the resident entity itself will do. Money, government bonds, and foreign bonds all expressed in a country's own interest-free currency are what make up a portfolio's total value. This idea is also known as "net financial value." Given that the demand for domestic assets has remained constant, the demand for international bonds is a strong indicator of the foreign exchange rate and a negative component of the local interest rate. Because the demand for international bonds is more affected by the foreign currency rate than by the national interest rate, this is the case.

Empirical Literature

Changes in the value of one currency relative to another go under several distinct names. The current framework for establishing exchange rates dictates the specifics of these conditions. Under the floating-rate system, an increase in the market price of a currency is called appreciation, while a decrease in market price is called depreciation. Under the floating-rate system, depreciation is the drop in the market price of a currency. Currency "revaluation" means an increase in value relative to its set par value, while currency "devaluation" means a decrease in value relative to its fixed par value, while a revaluation is an opposite. Here, we'll look into the causes of these

shifts (variations in the exchange rate) as well as their effects on GDP. To rephrase, we will be analyzing the effects of both the shifts and the fluctuations in the exchange rate on GDP.

Price changes within a country's economy are a reflection of the effect that fluctuating exchange rates have on aggregate supply and demand, as stated by Kandil (2004). Depreciation of a currency nearly always leads to higher import prices for a country that acts as a price taker on the global market, while the appreciation of a currency almost always leads to lower import prices. Devaluation may have a negative impact on GDP and other macroeconomic indicators. Edwards and Levy-Yeyati (2003) conducted a panel analysis of approximately 18 different countries and found that those with more flexible exchange rates saw faster economic growth. Supporting this research are the findings of economists Eichengreen and Leblang (2003), who looked at exchange rate stability and economic growth for 12 countries over 120 years and found a significant inverse correlation. Furthermore, an overvalued exchange rate will make it more difficult to increase production. With the goal of quantifying the dynamic effects of fluctuating exchange rates on the risk of exchange rates in agricultural trade flows, (Adubi and Okunmadewa 1999) performed empirical research. To accomplish this, we tracked the correlation between currency risk and rate fluctuations. A major takeaway from the discussion, as he put it, was that fluctuations in the value of the currency exchange rate harm the competitiveness of agricultural exports. He concluded that farmers' low incomes were to blame for the decline in output and exports brought on by the high degree of exchange rate fluctuation. He explained that the loss in output production and export trade was due to the high degree of exchange rate fluctuation. He reasoned that the decline in output production was due to the wide swings in exchange rates, which he had observed. An in-depth investigation of the connection between the naira/dollar exchange rate, inflection, and output in Nigeria was conducted by Batini (2004) and Mordi (2006), yielding some illuminating results. By analyzing the results of their inquiry, they arrived at this conclusion. Based on their modeling, they determined that the parallel exchange rate would have a negative impact on output over the short and medium term. As a result of their research, Batini and Mordi published their findings in the peer-reviewed journal Economica. Ndung'u (1993) used a statistical method called Vector Auto Regression (VAR) analysis in his studies. The purpose of this research was to analyze

six separate variables in an effort to deduce causes for Kenya's inflations in recent swings. Some of the factors considered were the total quantity of currency in circulation, the national price level, the exchange rate index, the international pricing index, real production, and the interest rate. It was discovered that inflation and the value of one currency relative to another can account for the movement of the latter. Ndung'u thought it inevitable that inflation rates and currency exchange rates would be linked. Employed the error correction technique to estimate, for a set of twentyseven nations, a regression equation between output and the actual exchange rate. These equation variables were estimated for a group of twenty-seven countries. The research undertaken did not find any evidence supporting the idea that a devaluation is to blame for the observed drop in economic activity over the long run.

Morley (1992) used regression to determine how weakening currencies in 28 developing countries affected output. The fact that this is true did not stop this from happening. These countries were considered as part of the research. It was found in his research that any time there was a change in the value of the actual exchange rate, production fell. Akpan and Atan (2015) used quarterly data from 1986-2010 to analyze the impact of Nigeria's currency exchange rate on the country's actual output growth. In this study, we looked into the possible links between shifts in exchange rates and GDP growth, classifying them as either direct or indirect. The analysis suggests that monetary policy, rather than fluctuations in the exchange rate, has been driving economic expansion in Nigeria in recent years. The fact that the currency's value has shifted very slightly over the past few days is indicative of this.

According to the data, there seems to be widespread agreement that a currency devaluation or depreciation has the potential to boost domestic output by encouraging the net export components. Based on the facts we have at the moment, this claim appears to be valid, but to varying of degrees. There is a sizable group of highly educated people living in the academic community, and many of them believe that devaluation always results in a contractionary boom. Having considered all of these factors, we have concluded that greater research into the issue at hand is warranted. This was a major factor that led us to our conclusion.

Summary of the Literature

This section provides a synopsis of the evaluated literature and discusses the gaps in our understanding that emerged from this analysis. The researchers relied heavily on the empirical literature to learn more about the study's variables, which centered on the impact of Nigeria's high exchange rate on the country's economic cycle. Additionally, the analysis factored in the share of GDP from exports, the value of the currency, and the rate of inflation. GDP In situations when the deflator is to be used as an independent variable, three different proxies might be employed. These are approximated using the trade balance, the volume of imports, and the volume of exports. However, gross domestic product (GDP) can be treated as a quantity that depends on still another variable, the deflator.

The findings of the previous study were deemed inconclusive by both the empirical review and the theoretical review that was recently presented to the audience. Neither review was able to provide a convincing explanation for their findings. This section will present the findings that were obtained. Because prior research has demonstrated that this particular nexus is the one that is most significant, it will serve as the basis for the investigation. The connection that has been established in the study between the rate of currency exchange and economic growth will serve as the foundation for the investigation. As a result, the inquiry will have this as its foundation because of the importance that is placed on it. In addition to this, the inconsistency with which succeeding political regimes in Nigeria have implemented policies regarding currency exchange is another factor that adds to the inconsistency of this area of policy implementation. This is one of the factors that contribute to the inconsistency of this area of policy implementation. This is one of the reasons that contribute to the discrepancy that can be seen in the application of the policy in this particular region. To address the empirical and theoretical gaps revealed by the prior investigation, the succeeding hypothesis will be tested as a direct result. With this, we want to close the knowledge gap exposed by our prior studies. Doing so will help address knowledge gaps identified by earlier studies. These voids could be located in: We know there are gaps in the literature on a few select subjects since previous research has revealed them to be understudied.

CHAPTER III Methodology

Introduction

The purpose of this subsection of the research paper is to show how well the author described the study's methodology, including the regression model used to compile the data for the thesis. This section contains in-depth descriptions and analyses of the various statistical methods utilized to evaluate the secondary data included in this research. The methods presented here were used to analyze the data used throughout this chapter.

Categories of Information and Their Origins

Both primary and secondary data collecting are common practices for meeting research needs. The researcher decided that secondary data collection would be the most efficient method of gathering information for this study. Using a database kept by the World Bank, secondary data were collected from any and all sources. The research focused on the fifty years in Nigeria between 1970 and 2020. Yearly data collection is standard practice for the time series information utilized in regression analysis. We proxy growth in the economy by looking at the yearly percentage increase in GDP. The foreign trade share of GDP, the private domestic credit share of GDP, yearly inflation, the GDP deflator (%), and the official exchange rate were the variables used. This analysis relied on data gathered from previous years' GDP growth rates.

Variables, as well as the Methods Used to Measure Variables

The variables that were utilized for this thesis were derived from a database that was open to the general public and was maintained by the World Bank to ensure that it was as current as possible. For the purpose of conducting the analysis of the study, the data obtained were separated into two categories: the independent variables and the dependent variables. The analysis results for this study's data collection and collection procedures are offered. The growth rate of annual GDP was selected for this study because it could serve as both an independent variable and a proxy for economic expansion. We also used inflation, the GDP deflator (annual %), and the official exchange rate in addition to data on private sector credit and trade within the country.

Gross Domestic Product Annual (% of Growth)

The value, in terms of economic output, of all of the final goods and services produced in a nation during a specified period of time, is what is referred to as that nation's "Gross Domestic Product" (GDP). This value is measured in terms of dollars. These are the goods and services that are ultimately acquired by the consumer as the final purchaser (say a quarter or a year). It takes into account the total output of everything that is generated inside the borders of a country. In addition, the GDP takes into account certain output that is not tied to the market, such as the provision of services related to education and the military by the government. These are examples of non-market output. Gross national product, sometimes known as GNP, is an alternative method of measurement that takes into account all that is created by the people who live in a certain nation.



The progression of GDP growth as a percentage in Nigeria is depicted in the following graph, which spans the years 1970 through 2020. The late 60s to early 70s showed that the GDP had a downward drop but saw a little upward trend in 1975, but another drop was seen in the 80's when the first recession occurred during Buhari's military regime the second recession also occurred in 2016. The GDP saw another drop and negative growth in 2020 due to the global pandemic and lockdown that occurred in 2020.

Trade % of GDP

The value of exports and imports as a proportion of GDP measures the extent to which a country engages in international trade.



Trade percentage graph shows the data for the trade sequel in Nigeria dated from 1970 to 2020. In 1985 trade in Nigeria saw a decline due to the change in government that the country experienced the ban on the importation of agricultural goods at that. Although the movement has been sideways 2020 has seen a positive and upward trend.

Domestic Credit to Private Sector % of the GDP

The term "domestic credit to the private sector" is used to describe bank loans made in the domestic market to private companies and organizations. These can come in the form of debts, trade credits, acquisitions of non-equity investments, or other accounts receivable and payable obligations. Any purchase like this can be considered a reimbursement request in the future. Credits due to state-owned companies in some nations could potentially fall under this category of claims. The monetary authorities and the deposit-taking institutions are both considered to be part of the financial sector. In addition to banks, other types of financial institutions include leasing and financing companies, as well as moneylenders, insurers, retirement savings plans, and currency exchanges.



Source: (Writer's E-view 12 analysis)

Figure 3:

The domestic credit that is extended by financial companies to private sectors in the form of debt and bonds is depicted in the form of a graph here, and that graph can be found below. This resulted in a significant increase in the amount of domestic credit that was made available to the private sector in 2009, which was caused by the government's announcement in 2009 that it would be privatizing a large number of the ministries that it owned, including the ministries of power and communications, amongst others. This announcement caused a surge in the approval of loans in the country during that time period.

GDP Deflator Inflation Rate (Annual Percent)

An indicator of the rate at which prices are changing throughout the economy as a whole, inflation is calculated as the annualized return of the GDP implicit deflator. Inflation measures the rate at which prices are changing. A percentage can be derived from this rate if one so chooses. In this context, the implicit deflator of GDP is defined as the ratio of GDP measured in present domestic currency to GDP measured in continuous domestic currency. This ratio compares GDP measured in current local currency with GDP measured in constant local currency. Once every twelve months, a calculation of this ratio is carried out.



The inflation rate in Nigeria skyrocketed to a record 219 percent in the early 1980s, as depicted by the graph, but measures and policies have been put in place to curb inflation since then, as evidenced by the curve's flattening down in more recent years.

The Official Currency Swap Rate

Currency exchange rates are used to determine how much one country's currency is worth in relation to another. Or, it shows the exchange rate or the number of the customer's native currency that can be purchased with one foreign currency.





The currency value demonstrates that the country's exchange rate was stable and very significant in the early 1980s, but that it has steadily and rapidly declined against the dollar since 1995 due to the devaluation of the currency to the dollar without the proper implementation of a good trading policy.

Model Specification

An autoregressive distributed lag model was selected for this study. The ARDL bound test was used for the co-integration test to find the long-run relationship; and finally, the ARDL bound test was used to determine the long-run relationship. To assess the short-run and long-run link between GDP growth and other independent variables including domestic lending to the private sector, inflation rate, trade, and the official exchange rate, this model was employed. All tests and regressions carried out as part of this study were aided by the E-views software. The ARDL bound test, in addition to the ARDL short-run and long-run tests, are all a part of this research. The unit root test was also incorporated. The residual diagnostic test will be performed with the stability test as planned. In order to rule out multicollinearity and other possible problems, the residual diagnostic test was rechecked using the histogram normality test, the Breusch-Godfrey serial correlation LM test, the Breusch-pagan Godfrey heteroscedasticity test, and the Jarque-Bera normality test. All of these tests were performed in conjunction with one another. The elimination of multicollinearity and any and all other possible problems was the objective of this project. We utilized the CUSUM test and the CUSUMSQ test at a level of significance of 5% in order to verify and reach a conclusion regarding the data's consistency. The CUSUM test was

performed to ascertain the accuracy of the data collected. The ARDL was utilized throughout this thesis, and the operational variables and applicable model specifications are detailed below.

 $\Delta \text{GDP}_{t} = \alpha_{0j} + \sum_{i=1}^{p} \beta_{ij} \Delta \text{TRADE}_{t-1} + \sum_{i=1}^{q1} \beta_{2j} \Delta \text{INV/GDP}_{t-1} + \sum_{i=1}^{q2} \beta_{3j} \Delta \text{INF}_{t-1} + \sum_{i=1}^{q3} \beta_{4j} \Delta \text{EXR}_{t-1} + \mu_{i} + \varepsilon_{it}$ (1)

Where; GDP = Gross Domestic Product

TRADE = Trade % of GDP INV/GDP = Domestic Credit to private sector % of GDP INF = Inflation deflator of GDP EXR = Official Exchange Rate i = The total amount of variables that the model contains.

j = is the length of time that passes in between.

p = Dependent Variable Lag Values.

q = Regressor Variable Lag orders.

 $\mu_i = \text{Error terms.}$

 ϵ_{it} = Vector of the Error terms.

Analysis of the Unit Roots

The unit root test is a precondition that needs to be finished in order for any research project to be qualified to make use of the ARDL model. This requirement must be met before the ARDL model can be utilized. In addition to this, it determines the dependability of the data that has been collected. If the unit root is statistically significant at 1%, 5%, or 10% at any level or initial difference, therefore the ARDL approach is the way that ought to be used to evaluate the data. This is because it is the method that yields the most accurate results.

These criteria allow for an evaluation of every other starting point that is considered. During the course of the research endeavor, both ARDL and the ARDL bound test were utilized in order to gather information. The determination of the unit root had to take place as the very first step of the procedure as a direct result of this. The augmented Dickey-Fuller (ADF) and Philips-Peron (PP) models were used to check our results and ensure that all of the relevant factors were taken into account. This was done to make sure all of the studied factors were considered.

Augmented Dickey-Fuller Test (ADF)

Dickey and Fuller (1979) built a computer program to demonstrate their hypothesis. To what extent a given variable is engaging in a causal random walk and whether or not it has a unit root are questions that can be answered by the software. That's what they did to prove their theory. When explaining the expanded Dickey-Fuller test, Hamilton (1994) uses four examples to illustrate its utility. Each case study focuses on a different individual. The essential idea behind the null hypothesis is that there can never be multiple unit roots for the variable in issue in any one location along the distribution. This holds true outside of any specific context in which it may be considered. Whether or not a drift term is included in the null hypothesis and whether or not a constant term and a temporal trend are included in the regression used to produce the test statistic are the most striking differences between the two approaches. The inclusion of a drift term in the test statistic for the second approach relies on the responses to these two questions. Several considerations are needed when deciding whether or not to include a drift term in the null hypothesis. The inclusion of a drift term in the null hypothesis will depend on these two factors taken together. This may or may not materialize depending on a number of factors. It uses a method very similar to the Dickey-Fuller test, but instead of being applied to the model, it is used to assess the reliability of the former procedure.

Philip-Peron Test

The Phillips-Perron test is classified as a unit root test within the discipline of statistics because to its focus on examining the relationship between two variables. Peter C. B. Phillips and Pierre-Perron are two of the statisticians mentioned; during their careers, they worked together and contributed greatly to the field of statistical analysis. Any study of time series that intends to reject the null hypothesis that the series is integrated using the first order of integration must employ the first order integration technique. Because no other approach can promise such precise outcomes. The Dickey-Fuller test is not performed here; instead, another method is employed to determine if the null hypothesis is correct.

 $yt = c + \delta t + a yt - 1 + e(t)$ (eq1)

According to the default assumption, a = 1 can only be equal to 1. Series with different growth characteristics can be tested using different iterations of the test that seek to limit the drift and deterministic trend coefficients (c and) to zero. As a result, there is a halt to any potential for expansion. Modified Consideration of serial correlations that arise during the creative process is achieved through the use of Dickey-Fuller statistics (t).

ARDL Bound Test and ARDL Model

Any time there is doubt as to whether the trend or the initial difference is the primary source of the data supporting a time series. By employing static, bound testing—a special case of ARDL modeling—in the framework of a univariate equilibrium correction system, the importance of delayed levels of variables can be emphasized.

Furthermore, ARDL limits testing is a technique that, according to Haug (2002), works better and is better suited for use with lower sample sizes. I cannot stress how crucial it is that you understand this. This is because the accuracy of the process is increased in the short run as a result of simultaneously computing the long-run and short-run parameters. An example of how the ARDL's analysis of the correlation between inflation and exchange rates could be put to use is shown below:

GDP= $\beta_0 + \beta_1 TRADE + \beta_2 INV/GDP + \beta_3 INF + \beta_4 EXR + \mu$

To determine if the two variables under research are co-integrated, the ARDL bound test was performed on each and every data point in the study. For instance, when the F-statistics go above the upper bound of I(1) at both the 5% and 10% significance levels, the null hypothesis of no long-term relationship or co-integration can be rejected. This is so because it proves that the alternative hypothesis is valid, rather than the null one. This is because it provides circumstantial evidence for the presence of a connection or co-integration. Once the ARDL bound test is finished, a short-term and a long-term form analysis are performed to examine the results of the study. To meet this condition, the ECT must be statistically significant and lie between zero and one for the model to be accepted.

Residual Diagnostics and Stability Test

Researchers use a diagnostic test called the residual diagnostic test to determine the validity of regression models and the reliability of the underlying variables. This check can be used by scientists to determine the accuracy of the models they are using. In order to evaluate the validity of the model employed in this inquiry, supplementary diagnostic tests are being covered. Included here are the tests for Residual Normality, White Heteroscedasticity, Serial Correlation, and Autocorrelation. Each of these analyses is a case study in the statistical test family known as heteroscedasticity. Charting the residual values against the expected values and charting the value of the residuals against the projected values allows one to evaluate the degree of autocorrelation between data points. When the estimated F-statistics are compared to the probability value, it is clear that heteroscedasticity is present in the model and that the null hypothesis is false.

The data were checked using CUSUM-square and residual diagnostics to make sure they were correct. The blue line indicates the flow of data, while the two red lines remain stable at a significance level of 5%. If the blue line is in the region where the two red lines connect, then the variables are stable within a 5% confidence interval.

CHAPTER IV

Findings and Discussion

Introduction

This section of the study is separated into four subchapters, each of which provides a synopsis of the study's findings. The impact of changes in exchange rates on inflation, exports, and loans to the private sector in domestic economies are graphically analyzed in the following section of the study. We'll look at how these four factors affect one another and how they interact with one another. The first section of this work devotes a significant amount of time and effort to a study of descriptive statistics and methods for data analysis. At the middle of the presentation, an overview of the stationary test of a data set is provided, and in the end, the issue of co-integration is explored in greater depth. The topic of co-integration will be explored and discussed in depth during the last session. In the final and concluding section of this chapter, we will discuss, among other things, diagnostic and stability tests, as well as regression analysis. Despite this, the presentation was conducted in a way that was consistent with the study's aims, and the testing was completed with the use of a piece of software called E-views.

Descriptive Statistics

In this part of the study, we looked into whether or not fluctuations in the value of the currency exchanged hands may possibly have an impact on the economy of Nigeria. Clarification will be provided in this section regarding the type of directional movement that the link is undergoing at this time. This study's descriptive statistics were prepared with the use of E-views to provide the researchers a head start on the data that would be studied. It was decided to do this in order to be of assistance to the researchers. The following table provides a summary and breakdown of the test results;

Table 2:

Descriptive Statistics Test

| | GDP | TRADE | INF | INV/GDP | EXR |
|--------------|------------|-----------|----------|----------|----------|
| Mean | 3.223925 | 33.58083 | 20.74797 | 8.937438 | 82.77665 |
| Median | 3.200125 | 34.45783 | 11.48876 | 8.120360 | 22.06540 |
| Maximum | 22.18228 | 53.27796 | 219.0028 | 19.62560 | 358.8108 |
| Minimum | -13.127880 | 9.135847 | 0.686099 | 4.699551 | 0.617708 |
| Std Dev. | 6.155085 | 12.10037 | 31.89636 | 3.40580 | 95.74004 |
| Skewness | -0.097123 | -0.467379 | 4.953085 | 1.148094 | 1.220236 |
| Kurtosis | 4.612405 | 2.276052 | 30.68863 | 4.129122 | 3.707383 |
| | | | | | |
| Jarque-Bera | 5.604863 | 2.970481 | 1837.683 | 13.91322 | 13.71963 |
| Probability | 0.060662 | 0.226448 | 0.000000 | 0.000952 | 0.001049 |
| | | | | | |
| Sum | 164.4202 | 1712.622 | 1058.147 | 455.8093 | 4221.609 |
| SumSq. Dev. | 1894.253 | 7320.947 | 50868.88 | 579.9720 | 458307.8 |
| | | | | | |
| Observations | 51 | 51 | 51 | 51 | 51 |

Source: (Writer's E-view 12 analysis)

Findings of the descriptive statistics are shown in the table located above this one. The median values for GDP, TRADE, INF, INV/GDP, and EXR were, in that order, 3.200125, 34.45783, 11.48876, 8.120360, and 22.06540 respectively. The skewness for GDP, which is 4.612405, is positive and advances to the right, as is the skewness for TRADE, INF, INV/GDP, and EXR, which are 0.467379, 4.953085, 1.148094, and 1.220236, respectively. The Kurtosis for TRADE, INF, INV/GDP, and EXR are all greater than 3, which indicates that they are in an excessively peaked state. The fact that the exchange rate is less than three and playkurtic is significant.

The Jarque-Bera probability value trade demonstrates that residuals follow a normally distributed distribution, however other residuals do not follow a normally distributed distribution since they have significant levels of less than 5%.

Unit Root Test (Stationary Test)

The unit root test, commonly known as the stationary test, will be applied in this inquiry under two different conditions: constant and constant with the trend. The Augmented Dickey-Fuller (ADF), the Philips-Perron, and the standard deviation of the root mean square will be used as the three criteria for the unit-root analysis (PP).

The tables that follow display the unit root's calculated values. Both an intercept and a trend were allowed for in the equation during the unit root test. There was a test of the unit root.

Table 2:

| ADF | | | | PP | | | |
|----------|------------|-------|-----------|----------|------------|-------|-----------|
| Variable | Т- | | Integrati | Variable | Т- | | Integrati |
| S | Statistics | Prob | on | S | Statistics | Prob | on |
| | | 0.000 | | | | 0.000 | |
| GDP | -5.590781 | 1 | I(1) | GDP | -5.601581 | 1 | I(1) |
| | | 0.000 | | | | 0.000 | |
| Trade | -7.578058 | 0 | I(0) | Trade | -7.593788 | 0 | I(0) |
| INV/GD | | 0.055 | | INV/GD | | 0.000 | |
| Р | -3.458811 | 4 | I(0) | Р | -9.781093 | 0 | I(1) |
| | 6 856082 | 0.000 | | | | 0.000 | |
| INF | -0.830082 | 0 | I(0) | INF | -6.862858 | 0 | I(0) |
| | | 0.000 | | | | 0.000 | |
| EXR | -6.397040 | 0 | I(1) | EXR | -6.387521 | 0 | I(1) |

Unit Root Test

Source: (Writer's E-view 12 analysis)

The unit root test higher up displays the results for Nigeria. The fact that certain variables are stationary at the level of initial differences and level I(0), similar to the situation with the trend, also shows that some variables are stationary at the significance levels of 5 and 10%. As a consequence of this, the research demonstrates that the alternative variable, which asserts that series are stationary at a level and first difference with a mean value of 5% and 10%, respectively, should be used rather than the null hypothesis, which states that series are not stationary, as shown in the table that is located above

Therefore, permitting the use of the ARDL model for the analysis of the thesis since it satisfies one of the most significant conditions for using ARDL: the stationary test must be integrated either at the level [I(0)] or at the initial differences [I(1)].

Table 3:

ARDL Bound Test

| ARDL Bound To | est | | | |
|---------------|---------|--------|-------------|-------------|
| | Value | Signif | Lower Bound | Upper Bound |
| F-statistic | 8.42966 | 10% | 2.68 | 3.53 |
| K | 4 | 5% | 3.05** | 3.97** |
| | | 2.5% | 3.4 | 4.36 |
| | | 1% | 3.81 | 4.92 |

Source: (Writer's E-view 12 analysis)

To check for co-integration in the dataset under examination, we employed the ARDL Bound test, which is based on the ARDL methodology. It was done to check for evidence of co-integration in the data set in question. If the F-statistic is bigger than both the lower bound I (0) and the upper bound I, the null hypothesis that there is no co-integration and, hence, no long-run effect on the independent variables toward the dependent variables is rejected. According to the alternative theory, co-integration does exist. If the F-statistic exceeds both of these values, the null hypothesis is rejected and the alternative hypothesis is accepted. If the null hypothesis holds, then there is no co-integration between the independent and dependent variables, and the independent factors do not have any long-run effect on the dependent variables. That is to say, no correlation exists between the two data sets (1). The existence of a co-integration relationship between GDP growth and the other variables for Nigeria was tested using a combined significant F-test against the null hypothesis of no co-integration relationship, written as (H0: 0=1.....= k=0). A correlation between the two was sought after. We performed these tests to determine whether or not a connection of this sort exists. Based on the results of this study, it seems like there might be some kind of link between the two factors. To get at the computational analysis, we first analyzed the dataset using the program E-views, which led to the results we provide here. Results showed that the ARDL bound to test for Nigeria, the F-statistics (8.42966), and the F-statistics at each of the three different levels of significance (1 percent, 5 percent, and 10 percent) were all bigger than the lower and upper bound at the 5 percent level of significance. Therefore, it became apparent that the null hypothesis was a flawed hypothesis. This lends credence to the idea that GDP growth and the other factors we analyzed are interconnected over longer time scales. The long-run result must be calculated in order to analyze the correlation between GDP growth and the model's other independent variables. To find out if there is a connection between the two, we need to do this study. The long-term effects of an event are crucial to calculate before doing any kind of investigation.

Table 4:

| ARDL Long-Run Test | | | | | | |
|--------------------|-------------|------------|--------------|----------|--|--|
| Variable | Coefficient | Std. Error | T-Statistics | Prob* | | |
| Trade | 0.023186 | 0.132620 | 0.174833 | 0.8626 | | |
| INF | -0.397963 | 0.141888 | -2.804757 | 0.0096** | | |
| INV/GDP | 0.877918 | 0.728129 | 1.205717 | 0.2392 | | |
| EXR | -0.200148 | 0.81184 | -2.465376 | 0.0209** | | |

ARDL Long-Run Test

Source: (Writer's E-view 12 analysis)

As can be seen in the accompanying table, which displays the outcomes of the ARDL long-run test, we found that both inflation and the exchange rate dampen economic expansion over the long term. Increasing the value of one currency relative to another has a negative effect on economic growth because it reduces economic activity by 0.2 units. According to ARDL's long-term model, the two variables are negatively correlated with economic growth. This link is demonstrated by the long-term model.

Table 4:

| ARDL Short-Run Test | | | | |
|---------------------|-------------|------------|--------------------|----------|
| Variable | Coefficient | Std. Error | T-Statistics | Prob* |
| DGDP(-1) | -0.613381 | 0.096244 | -6.373159 | 0.0000 |
| Dtrade(-1) | -0.149899 | 0.059586 | -2.515653 | 0.0187 |
| DINV/GDP | 0.112383 | 0.249412 | -0.450593 | 0.6562 |
| DINF | -0.086830 | 0.015302 | -5.674371 | 0.0000 |
| DEXR | -0.089078 | 0.028790 | -3.094101 | 0.0048 |
| ECM | -0.488094 | 0.062652 | -7.790607 | 0.0000 |
| Adj R-quared | 0.859902 | | Prob(F-statistics) | 0.000000 |
| F-Statistics | 12.275770 | | Durbin-Watson | 1.890081 |

ARDL Short-Run Test and Error Correction Model

Source: (Writer's E-view 12 analysis)

The table above contains the results after the ARDL short-run form was regressed, all variables are statistically significant apart from Domestic Credit Private Sector represented in the table as INV/GDP the value showed that although in the short-run Domestic credit is significantly correlated to economic growth but still insignificant statistically at 0.6562.

DTRADE (-1): The short-run form for trade as a percentage of GDP demonstrates a negative relationship between trade and economic growth, with a 0.0187 significance level. A country like Nigeria, where imports are typically higher than exports, where smuggling is a problem, and where the currency rate is always rising, is a good example of why a percentage change in trade might lead to a 14% decline in economic growth.

DINF: The results of a short-run variation of the ARDL demonstrate that the inflation rate has a negative effect on economic growth. This indicates that economic growth will fall by 0.08 units for every one-unit change in the inflation rate. At a significance level of 5 percent, the results are statistically significant because the probability value registered as 0.0000.

DEXR: Since Nigeria follows a flexible exchange rate system and the value of the Naira relative to the dollar has been steadily declining over the past few years, the results for the exchange rate showed that the exchange has a large and negative effect on economic growth in Nigeria. For every 1 unit increase in the exchange rate, economic growth reduces by 0.08 units, as shown by the negative effect. When analyzed at the 0.05 threshold of significance, these findings become very significant.

ECM: The Rate of adjustment to short-run disequilibrium is indicated by the Error Correction model. Based on the ECM findings, it is economically significant, negative, and within the range of 1 as stated in the prior chapter. These numbers indicate a chance of 0.0000 and a value of -0.488. Therefore, the rate of adaptation is 48%.

As measured by the Adjusted R-squared value, 85% of the independent variable is responsible for explaining the dependent variable, here GDP growth percentage is a surrogate for economic growth. The F-statistics probabilities indicate that all of the independent variables work together to partially explain the dependent variable. The Durbin-Watson test demonstrates the absence of multicollinearity and the presence of positive autocorrelation at a value of 1.89.

Residual Diagnostics Test

The diagnostic tests will determine if heteroscedasticity, autocorrelation, and a normal distribution of the error terms are present using Breush-Pagan-Godfrey, Breush-Pagan-Godfrey, and the Normality test. All of this will demonstrate the robustness of our study paradigm. The findings are presented in the next section in tabular form.

Table 5:

| Kesiauai Diagnostics Tes | lesidual | Diagnostics | Test |
|--------------------------|----------|-------------|------|
|--------------------------|----------|-------------|------|

| Residual Diagnostic Test | | | | | | |
|--------------------------|----------|----------------------------|---------------|-------------------------|---------------|--|
| Normality Test | | Serial Correlation LM Test | | Heteroscedasticity Test | | |
| Jarque-Berra | Prob. | F-statistic | prob. F(1,24) | F-statistic | prob. F(1,43) | |
| 2.064718 | 0.356166 | 0.107577 | 0.7458 | 0.897603 | 0.3487 | |

Source: (Writer's E-view 12 analysis)

A normality histogram plot of the test data reveals a Probability value of 0.356166, which is statistically significant at the 0.05 level. This shows that the data used in the analysis is reliable and that the normality test results are normally distributed.

The Prob Value for the lack of multicollinearity in the data was more than the 5% significance level for the Serial Correlation LM test. The fact that 0.7458 was greater than the Prob Value demonstrated this. The serial correlation analysis showed no evidence of multicollinearity in the data, as 0.7458 is more than 0.05.

Our results from the heteroscedasticity test lead us to reject the null hypothesis, as the p-value of 0.3487 is larger than the significance level we chose (5%). The evidence suggests that the alternative hypothesis is true, rather than the null one. The significance level used in this thesis is 0.05, and all the probabilities assigned to Nigeria's variables are higher than that, hence Nigeria is an important country.

Stability Test

The results of the stability test for each variable in the study are shown in this subsection. The CUSUM and CUSUMSQ tests were carried out here. CUSUM and CUSUMSQ findings are approved if and only if the blue line (representing the variables) falls inside the boundaries of the two lines at the 5% significance level.



Source: (Writer's E-view 12 analysis)





Source: (Writer's E-view 12 analysis)

Both the CUSUM and CUSUMSQ tests conducted during this study are displayed in the figure above. The provided information demonstrated that the regressors are stable and fall between the two red lines depicting the stability boundary. No changes have been observed in any of the variables at the level of significance depicted in the image above.

Interpretation of the Results and Its Connection to the Hypothesis of the Research

This section demonstrates the findings from Chapter four and their connections to or relationships with the underlying assumptions.

Null Hypothesis

There is No relationship Between a High Exchange rate and the Business Cycle in Nigeria

Reject,

Based on the data collected, the null hypothesis that there is no correlation between high exchange rates and the Nigerian business cycle is rejected, suggesting that there is a negative association between the exchange rate and the Nigerian business cycle. Due to the country's reliance on imports, the Naira's value relative to the US dollar plays a pivotal role in the economy.

There is No relationship Between a High Exchange rate and Economic Growth in Nigeria

Reject,

Given these findings, it is reasonable to conclude that the null hypothesis that there is no association between high exchange rates and economic growth in Nigeria should be rejected.

Alternative Hypothesis

The alternative hypothesis, which presents a more optimistic perspective for the outcomes and predicts or just estimates that the variables employed in the data analysis are connected and statistically significant, is basically the exact opposite of the null hypothesis.

There is a relationship Between a High Exchange rate and the Business Cycle in Nigeria

Accept,

Since the results of the data analysis showed a negative relationship between the exchange rate and the business cycle in Nigeria, the alternative hypothesis that there is a relationship between the two was adopted.

There is No relationship Between a High Exchange rate and Economic Growth in Nigeria

The alternative theory, according to which there is a link between exchange rates and the economy of Nigeria, was approved because it is consistent with the results of the data analysis, which demonstrate a conflict between exchange rates and Nigeria's economic growth. Because of the over-dependence on oil by the Nigerian government, as the exchange rate rises, economic development would slow.

CHAPTER V

Summary, Conclusion, and Recommendation

Introduction

In this section of the research study, an attempt was made to provide a summary of his research. This summary included a description of his work beginning with the first chapter's introduction and continuing through the second chapter's conceptual and theoretical frameworks, as well as the method that was used to draw conclusions from the data presentation and analysis. In order to accomplish this, he started with the introduction to the first chapter and then worked his way through the conceptual and theoretical frameworks presented in the second chapter. This chapter provides a synopsis of the study that was carried out and the findings that were drawn as a result in light of the conclusions that were drawn.

Summary

This dissertation examined the effect of fluctuating currency rates on Nigeria's business cycle. Estimation in this study was performed using the Autoregressive Distributive Lag Model (ARDL). Gross Domestic Product was used as a proxy for the business cycle and economic growth as the dependent variable in this analysis. Trade's share of GDP, private sector credit at home, inflation, and the currency exchange rate were the study's independent variables. The first chapter's issue statement, which provides context for the research and explains why we chose this particular topic, was helpful in introducing the subject at hand and pinpointing the gap that has to be bridged once the analysis was complete. Correlations between the research subjects this study was designed to examine and the variables employed in the investigation were also described in the first chapter.

In this research endeavor, the second chapter's primary focus was on doing a literature review of relevant and related material. This is primarily a discussion of earlier works that have been published and written about the topic of the research study, as well as various sorts of literature that is linked to the topic. The following
are some of the components that were included: conceptual, theoretical, and empirical frameworks. In the third chapter, which was devoted to the research methodologies that were utilized, topics such as the research design, the study population, the method of data presentation and analysis, the model definition, and the method of model assessment methodology were discussed. In chapter three, we also discussed the research methodology that was utilized in order to get secondary data for the purpose of the study. The primary sources of secondary data were the database of the World Bank and the statistics bulletin published by the CBN. While chapter four provided a quantitative framework for the information and statistics presented so that it could be easily understood. E-Views and a method known as ARDL modeling were utilized in order to do the analysis of the results. In chapter five, we considered providing a summary of the results produced, as well as a conclusion and some suggestions based on the discoveries that were made. This was done with the intention of contributing to future improvements in numerous fields of application to other researchers and organizations.

The secondary data that was used in this thesis had a yearly frequency and covered the period of time from 1970 to 2020. This spans a total of 51 years. The information for the entire thesis came from a database maintained by the World Bank.

Findings

According to the empirical findings of the Augmented Dickey-Fuller and the Philips-Peron tests, the variables are stationary in a mixed form both at the level and at the difference. This has been demonstrated to be the case. As a direct result of this, the application of the ARDL bound and ARDL test that was selected for this inquiry was suitable for its intended purpose.

Because the F-statistics are higher than both the lower band and the upper band, the results of the ARDL bound test suggest that there is a relationship between the variables in the long run. This is due to the fact that the lower band and the upper band are both higher than the F-statistics. This lends credence to the idea that the variables are connected in some fashion. The results of the ARDL long-run test indicated that all three variables— Trade, Inflation Rate, and Exchange Rate—had substantial long-run associations with economic growth. On the other hand, the domestic private sector business cycle did not display any substantial long-run correlations with either economic growth or the domestic private sector business cycle. When the ARDL short-run analysis was carried out, it was discovered that each of the variables possessed some level of statistical significance, as the data demonstrated.

TRADE: In the short run, there was a negative relationship between trade and the business cycle, and the value for this was -0.1498. This means that for every unit increase in trade, there is a decrease of 0.1498 in the business cycle. However, in the long run, as trade continues to increase, the effects become positive, and this was represented by 0.0231. The proportion of GDP attributable to trade in Nigeria has a stimulatory impact on both the business cycle and economic expansion.

INF: Both the short-run and the long-run results show that a high inflation rate has a negative effect on the business cycle and economic growth in Nigeria; this is correct because as inflation rates show an upward trend, the cost of living increases, and this, in turn, will influence the growth for the economy in a negative way.

INV/GDP: In the short run, domestic credit extended to the private sector in Nigeria has a positive relationship; this is true as more and more loans are given to private businesses, it helps with expansion which in turn creates jobs and other opportunities that improve economic growth in Nigeria; the results show that as a unit increase occurs in INV/GDP business cycle increases as well at 0.1123 units.

EXR: Results showed a negative correlation between the exchange rate and business cycles, both in the long and short terms. Long-term economic growth slows by 0.2001 percentage points for every one percentage point increase in the real exchange rate, and short-term growth slows by 0.0890 percentage points.

The Error Correction Model exemplifies the pace of adjustment, drawing attention to the rate of response to short-run disequilibrium. The ECM results reveal that it satisfies the economic conditions laid out in the previous chapter, which states that the value must be significantly negative and between zero and one. Furthermore, the ECM determined that it must be statistically significantly negative in value. These numbers indicate a chance of 0.0000, which translates to a value of -0.488. We calculated that the rate of adjustment is 48% after taking all relevant factors into account.

The corrected R-square value suggests that the independent variable adequately explains the dependent variable (in this case, GDP growth as a measure of economic health) to the amount of 85.0 percent. Since the F-statistics are probabilistic, we can infer that all of the variables are interconnected and contribute to the explanation of the dependent variable. When the Durbin-Watson test gets a value of 1.89, it determines that there is positive autocorrelation in the data but also that there is no multicollinearity in the data.

Conclusion

The researchers set out to answer the question, "How does a high exchange rate affect the business cycle in Nigeria?" There were five distinct parts to the research paper: an abstract, a literature review, a section on the methodology and its rationale, a section on the presentation of the data, an analysis and conclusions section, and a section on ideas for future study. Short-term and long-term effects of inflation reveal that it is detrimental to the business cycle and national economic growth. Increases in GDP were used as a surrogate for economic growth, and the impact of a high exchange rate on the business cycle was examined from a number of different angles. In turn, the expansion results in the creation of new opportunities, such as new jobs, which boosts Nigeria's economic development. Nonetheless, short-term inflation data demonstrates that a high inflation rate is bad for trade. While the growth of international trade had negative short-term effects on the economy, it produced positive long-term effects. Inflation was linked to the exchange rate because of the unfavorable relationship between the currency rate and the economic cycle over the long and short term. Exchange rates and business cycles were intertwined in both the long and short term, as was the case here. Internal and external impacts of a high exchange rate on Nigerian businesses were examined in this study. In light of this, this study's literature evaluation makes use of prior studies. This research shows that the comparatively high exchange rate in Nigeria has a negative impact on the trade surpluses and deficits of Nigerian multinationals. The fact that the currency rate in Nigeria was fluctuating. The

results suggest that an extreme exchange rate can have a significant effect on the business cycle.

When analyzing data from Nigeria over the past three decades, (Olaniran O. D et al 2017) found that high exchange rates have an impact on the business cycle, which in turn affects growth and the macroeconomic variables studied. The dramatic rise in the global poverty rate over the past few years can be partially explained by this.

Policy Recommendations

Nigeria, with the largest population on the African continent, is a country whose economy relies heavily on the export of crude oil, the proceeds from which constitute a major contribution to the country's GDP. The country is also quite influential in the business world, especially on the global stage. Therefore, the exchange rate has a substantial effect on the economic cycle in Nigeria.

The following is a list of recommendations for potential new policies:

As a first step, the government can strive to enhance supply and demand for the naira by expanding the range of goods it exports beyond only crude oil. As a result, the naira's value will rise in relation to the US dollar, raising the naira's purchasing power.

Second, redesigning the money would help eradicate the problems that are associated with counterfeiting and the circulation of fake currencies in the country, as well as provide assistance in the fight against smuggling cartels in the country. As a last point of discussion, rather than the ongoing devaluation of the currency, it would be preferable to have a fixed exchange rate that is supported by federal reserves. This would help to enhance the purchasing power of the Naira.

By meticulously crafting monetary and fiscal policy, one can lessen the likelihood of adverse effects brought on by the phases and lessen their influence.

The economy, in the long run, has a system that can heal itself and does not necessarily require intervention from the government.

Over the course of its existence, every capitalist economy goes through the economic cycle's expansion, peak, contraction, and trough phases. Despite the possibility of a long-term economic self-correction, the government and central bank of Nigeria should take steps to reduce the impact of the country's high exchange rate on the business cycle. The high exchange rate will have less of an effect on the economy thanks to these measures. The Nigerian central bank should have the leeway to implement policies that either expand or contract the money supply or modify the interest rate, or do both. The bank's ability to manage the economy efficiently depends on its ability to act with such discretion. Also, the government should employ tax rates and spending to control economic volatility through the tools of fiscal policy. Averting potentially catastrophic crises like stagflation and hyperinflation can be accomplished with such responsible behavior.

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Appendix I







Source: (Writer's E-view 12 analysis)



Domestic Credit to Private Sector % of the GDP







Inflation



Source: (Writer's E-view 12 analysis)

Graph 5:





Table 2:

| | GDP | TRADE | INF | INV/GDP | EXR |
|--------------|------------|-----------|----------|----------|----------|
| Mean | 3.223925 | 33.58083 | 20.74797 | 8.937438 | 82.77665 |
| Median | 3.200125 | 34.45783 | 11.48876 | 8.120360 | 22.06540 |
| Maximum | 22.18228 | 53.27796 | 219.0028 | 19.62560 | 358.8108 |
| Minimum | -13.127880 | 9.135847 | 0.686099 | 4.699551 | 0.617708 |
| Std Dev. | 6.155085 | 12.10037 | 31.89636 | 3.40580 | 95.74004 |
| Skewness | -0.097123 | -0.467379 | 4.953085 | 1.148094 | 1.220236 |
| Kurtosis | 4.612405 | 2.276052 | 30.68863 | 4.129122 | 3.707383 |
| | | | | | |
| Jarque-Bera | 5.604863 | 2.970481 | 1837.683 | 13.91322 | 13.71963 |
| Probability | 0.060662 | 0.226448 | 0.000000 | 0.000952 | 0.001049 |
| | | | | | |
| Sum | 164.4202 | 1712.622 | 1058.147 | 455.8093 | 4221.609 |
| SumSq. Dev. | 1894.253 | 7320.947 | 50868.88 | 579.9720 | 458307.8 |
| | | | | | |
| Observations | 51 | 51 | 51 | 51 | 51 |

Source: (Writer's E-view 12 analysis)

Table 2:

Unit Root Test

| ADF | | | PP | | | | |
|----------|------------|-------|-----------|----------|------------|-------|-----------|
| Variable | Т- | | Integrati | Variable | Т- | | Integrati |
| S | Statistics | Prob | on | S | Statistics | Prob | on |
| | | 0.000 | | | | 0.000 | |
| GDP | -5.590781 | 1 | I(1) | GDP | -5.601581 | 1 | I(1) |
| | | 0.000 | | | | 0.000 | |
| Trade | -7.578058 | 0 | I(0) | Trade | -7.593788 | 0 | I(0) |
| INV/GD | | 0.055 | | INV/GD | | 0.000 | |
| Р | -3.458811 | 4 | I(0) | Р | -9.781093 | 0 | I(1) |
| | 6 956092 | 0.000 | | | | 0.000 | |
| INF | -0.830082 | 0 | I(0) | INF | -6.862858 | 0 | I(0) |
| | | 0.000 | | | | 0.000 | |
| EXR | -6.397040 | 0 | I(1) | EXR | -6.387521 | 0 | I(1) |

Source: (Writer's E-view 12 analysis)

| ARDL Bound Test | | | | |
|-----------------|---------|--------|-------------|--------------------|
| | Value | Signif | Lower Bound | Upper Bound |
| F-statistic | 8.42966 | 10% | 2.68 | 3.53 |
| К | 4 | 5% | 3.05** | 3.97** |
| | | 2.5% | 3.4 | 4.36 |
| | | 1% | 3.81 | 4.92 |

Source: (Writer's E-view 12 analysis)

Table 4:

ARDL Long-Run Test

| ARDL Long-Run Test | | | | | |
|--------------------|-------------|------------|--------------|----------|--|
| Variable | Coefficient | Std. Error | T-Statistics | Prob* | |
| Trade | 0.023186 | 0.132620 | 0.174833 | 0.8626 | |
| INF | -0.397963 | 0.141888 | -2.804757 | 0.0096** | |
| INV/GDP | 0.877918 | 0.728129 | 1.205717 | 0.2392 | |
| EXR | -0.200148 | 0.81184 | -2.465376 | 0.0209** | |

Source: (Writer's E-view 12 analysis)

Table 4:

ARDL Short-Run Test and Error Correction Model

| ARDL Short-Run Test | | | | |
|---------------------|-------------|------------|--------------------|----------|
| Variable | Coefficient | Std. Error | T-Statistics | Prob* |
| DGDP(-1) | -0.613381 | 0.096244 | -6.373159 | 0.0000 |
| Dtrade(-1) | -0.149899 | 0.059586 | -2.515653 | 0.0187 |
| DINV/GDP | 0.112383 | 0.249412 | -0.450593 | 0.6562 |
| DINF | -0.086830 | 0.015302 | -5.674371 | 0.0000 |
| DEXR | -0.089078 | 0.028790 | -3.094101 | 0.0048 |
| ECM | -0.488094 | 0.062652 | -7.790607 | 0.0000 |
| Adj R-quared | 0.859902 | | Prob(F-statistics) | 0.000000 |
| F-Statistics | 12.275770 | | Durbin-Watson | 1.890081 |

Source: (Writer's E-view 12 analysis)

Table 5:

Residual Diagnostics Test

| Residual Diagnostic Test | | | | | | |
|--------------------------|----------|--------------|-----------------|-------------------------|---------------|--|
| Normality Test | | Serial Corre | elation LM Test | Heteroscedasticity Test | | |
| Jarque-Berra | Prob. | F-statistic | prob. F(1,24) | F-statistic | prob. F(1,43) | |
| 2.064718 | 0.356166 | 0.107577 | 0.7458 | 0.897603 | 0.3487 | |

Source: (Writer's E-view 12 analysis)

Graph 6:





Source: (Writer's E-view 12 analysis)



Cusum Square



Ethical Committee Approval



BİLİMSEL ARAŞTIRMALAR ETİK KURULU

13.10.2022

Dear Augustine Peter Gargu

Your project "Impact of high foreign exchange rate on business in Nigeria" has been evaluated. Since only secondary data will be used the project it does not need to go through the ethics committee. You can start your research on the condition that you will use only secondary data.

BV. 5

Prof. Dr. Aşkın Kiraz

Rapporteur of the Scientific Research Ethics Committee