

**IBN HALDUN UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
DEPARTMENT OF ECONOMICS**

**MASTER THESIS**

**THE RELATIONSHIP BETWEEN FINANCIAL  
DEVELOPMENT AND ECONOMIC GROWTH  
THE CASE OF ECOWAS FROM 1975 TO 2020**

**YAHYA SONKO**

**THESIS SUPERVISOR  
PROF. RASİM ÖZCAN**

**ISTANBUL, 2022**

**IBN HALDUN UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
DEPARTMENT OF ECONOMICS**

**MASTER THESIS**

**THE RELATIONSHIP BETWEEN FINANCIAL  
DEVELOPMENT AND ECONOMIC GROWTH  
THE CASE OF ECOWAS FROM 1975 TO 2020**

by

**YAHYA SONKO**

**A thesis submitted to the School of Graduate Studies in partial  
fulfillment of the requirements for the degree of Master of Arts in  
Economics**

**THESIS SUPERVISOR  
PROF. RASİM ÖZCAN**

**ISTANBUL, 2022**

APPROVAL PAGE

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts in Economics.

Thesis Jury Members

Title - Name Surname

Opinion

Signature


This is to certify that the School of Graduate Studies at Ibn Haldun University has not imposed any additional requirements on this thesis beyond those that it already fulfills.

Submission Date

Signature

## ACADEMIC HONESTY ATTESTATION

I, at this moment, certify that all of the material included in this paper was gathered and presented in a manner compliant with academic regulations and ethical standards of behavior. I further declare that, following these rules and standards of behavior, I have properly attributed and referenced any information and outcomes that are not my own and unique to this work.

Name Surname: Yahya SONKO

Signature:



ÖZ

EKONOMİK BÜYÜME İLE FİNANSAL DERİNLEME ARASINDAKİ İLİŞKİ:  
1975'TEN 2020'YE ECOWAS ÖRNEĞİ

Sonko, Yahya

İktisat Yüksek Lisans Programı

Öğrenci Numarası: 204024005

Open Researcher and Contributor ID (ORC-ID): 0000-0001-8661-5783

Ulusal Tez Merkezi Referans Numarası: 10464118

Tez Danışmanı: Prof. Dr. Rasim Özcan

Ekim 2022, 57 sayfa

Finansal gelişme, kalkınma ekonomisi tarihinde uzun zamandır ekonomik büyümenin önemli bir faktörü olarak görülmüştür. Ek olarak, bilimsel literatürden elde edilen önemli veriler, finansal okuryazarlık ve farkındalığın herhangi bir gerçek ekonomik ilerleme için ön koşul olduğunu göstermektedir. ECOWAS örneğinde, ekonomik büyüme için bir ön koşul olarak finansal gelişme kavramı makroekonomi için kritik öneme sahiptir. Bununla birlikte, çalışmaların hiçbiri 1975'ten 2020'ye kadar ECOWAS üye ülkelerindeki finansal gelişme düzeyini özel olarak incelememiştir. Bunu hesaba katarak, bu yüksek lisans tezi, Batı Afrika Devletleri Ekonomik Topluluğu (ECOWAS) üye ülkelerindeki finansal gelişmenin uygunluğunu incelemektedir. Ekonomik ilerleme arayışı. Araştırma sorularına yanıt aranırken, bu nicel araştırma için verileri elde etmek için Dünya Bankası veri tabanı kullanılmıştır. GSYİH büyüme oranı, Net İç Kredi, Devlet Harcamaları ve Ticari Açıklık, her bir ECOWAS üye devleti için bu çalışmanın istatistiklerine dahil edilen dört temel faktördü. Bu çalışma, panel veri çalışmalarını yorumlamak için ideal olan ilgili hipotezi test etmek için STATA kullanarak verileri analiz etmiştir. Araştırma, ECOWAS üye ülkeleri arasında ekonomik büyüme ve finansal gelişme arasında önemli bir ilişki keşfetti.

**Anahtar Kelimeler:** Ekonomik Büyüme, Finansal Derinleşme, Finansal Kurumlar, Mali Açık, Siyasi İstikrarsızlık, Fiyat İstikrarı.

## ABSTRACT

### THE RELATIONSHIP BETWEEN ECONOMIC GROWTH AND FINANCIAL DEEPENING: THE CASE OF ECOWAS FROM 1975 TO 2020

Sonko, Yahya

MA in Economics

Student ID: 204024005

Open Researcher and Contributor ID (ORCID): 0000-0001-8661-5783

National Thesis Center Reference Number: 10464118

Thesis Supervisor: Prof. Rasim Özcan

October 2022, 57 Pages

Financial development has long been seen as an important factor of economic growth in the history of developmental economics. Additionally, substantial data from scholarly literature indicates that financial literacy and awareness are prerequisites for any real economic progress. In the case of ECOWAS, the notion of financial development as a prerequisite for economic growth is critical to macroeconomics. However, none of the studies specifically examined the level of financial development in ECOWAS member countries from 1975 to 2020. On this account, this master's thesis investigates the relevance of financial development in the Economic Community of West African States (ECOWAS) member nations' pursuit of economic progress. In the attempt to answer the research questions, the World Bank database was used to obtain the data for this quantitative investigation. GDP growth rate, Net Domestic Credit, Government Expense and Trade Openness were the four primary factors included in the statistics of this study for each ECOWAS member state. This study analyzed the data using STATA to test the hypothesis of interest, which is ideal for interpreting panel data studies. The research discovered a substantial relationship between economic growth and financial development across ECOWAS member nations.

**Keywords:** Economic Growth, Financial Deepening, Financial Development  
Financial Institutions, Political Instability, Price Stability.

## DEDICATION

It is dedicated to my late grandmother Aja Jabou Njagne!



## TABLE OF CONTENTS

<b>ÖZ</b> .....	<b>iv</b>
<b>ABSTARACT</b> .....	<b>v</b>
<b>DEDICATION</b> .....	<b>vi</b>
<b>TABLE OF CONTENTS</b> .....	<b>vii</b>
<b>LIST OF TABLES</b> .....	<b>ix</b>
<b>LIST OF FIGURES</b> .....	<b>x</b>
<b>LIST OF SYMBOLS AND ABBREVIATIONS</b> .....	<b>xi</b>
<b>CHAPTER I INTRODUCTION</b> .....	<b>1</b>
1.1. Research Background.....	1
1.2. Research Objectives .....	3
1.3. Thesis Organization.....	4
<b>CHAPTER II LITERATURE REVIEW</b> .....	<b>5</b>
2.1. Economic Growth and Financial Deepening in the Regional Context .....	5
2.1.1. Middle Eastern Regions .....	6
2.1.2. Europe and Related Regions.....	8
2.1.3. Sub-Saharan African Region .....	9
2.2. The Problematic Aspect of the Literature .....	12
2.2.1. Per Capita Income .....	12
2.2.2. Financial Systems .....	13
2.3. The Indicators .....	13
2.3.1. Economic Growth .....	14
2.3.2. Financial Deepening .....	16
2.3.3. Financial Development .....	19
<b>CHAPTER III METHODOLOGY AND APPLICATION</b> .....	<b>21</b>
3.1. Scope of the Research .....	21
3.2. Methodology and Data Arrangement.....	21
3.3. Definition of Research Variables .....	22
3.4. Dependent Variables .....	23
3.5. Independent Variables.....	23
3.6. Control Variables .....	24
3.7. Data Analysis .....	25
3.8. Limitation .....	30

<b>CHAPTER IV RESULTS .....</b>	<b>31</b>
4.1. Summary of the Statistics.....	31
4.2. Correlations Analysis among Study Variables.....	31
4.3. Cross-Sectional Dependency.....	32
4.4. Unit Root Test .....	33
4.5. Results from the Fixed and Random Effect Model Estimation.....	33
4.6. Regression Analysis Results .....	35
4.7. Explanations of the General Results .....	37
<b>CHAPTER V CONCLUSION AND DISCUSSIONS.....</b>	<b>47</b>
<b>REFERENCES .....</b>	<b>49</b>
<b>APPENDIXES.....</b>	<b>56</b>
<b>APPENDIX A.....</b>	<b>56</b>
<b>CURRICULUM VITAE.....</b>	<b>57</b>

## LIST OF TABLES

Table 3.1. ECOWAS Member Countries and Their Status into the Union .....	22
Table 4.1. Summary of the Four Main Variables .....	31
Table 4.2. Correlation Analysis .....	32
Table 4.3. Hausman Test of Fixed versus Random-Effect Model.....	34
Table 4.4. OLS Regression Results: Relationship between Variables.....	35
Table 4.5. List of Coups among ECOWAS Member States .....	38
Table 4.6. ECOWAS Member Countries and Their Ratio to GDP .....	41



## LIST OF FIGURES

Figure 1.1. Economic Growth and Financial Development.....	3
Figure A.1. Map of ECOWAS Member States.....	56



## LIST OF SYMBOLS AND ABBREVIATIONS

ECOWAS	Economic Community of West African States
FD	Financial Development
FDI	Foreign Direct Investment
FE	Fixed Effect Model
GDP	Gross Domestic Product
GCA	General Choice Algorithm
IMF	International Monetary Fund
LDC	Less Developed Countries
OLS	Ordinary Least Square
RE	Random Effect Model

# CHAPTER I

## INTRODUCTION

### 1.1. Research Background

In much of society, a growing corpus of literature emphasizes the necessity for financial literacy, deepening and development (Darrat, 2002; Ibrahim, 2015; Patrick, 1966). This necessity is essential and relevant in Sub-Saharan Africa and ECOWAS member nations (Inoue & Hamori, 2016). The Economic Community of West Africa States, also known as ECOWAS is a West African trade and economic bloc founded in 1975 to encourage trade and regional integration among West African nations. However, since the bloc's inception, some members have withdrawn, while others have pending joining applications—nonetheless, today. The 15-member states included Mali, Benin, Sierra Leone, Cabo Verde, Niger, The Gambia, Ghana, Togo, Guinea-Bissau, Liberia, Guinea, Senegal, Côte d'Ivoire, Burkina Faso, and Nigeria.

With that being said, this study scrutinizes the role of Financial developing in achieving economic growth in ECOWAS member nations. In this research, financial development and financial deepening are used interchangeably. However, Financial deepening refers to the process in which a financial system grows and becomes a more complex entity, while financial development refers to the overall growth and efficiency of the financial system. Financial deepening has been seen as a critical determinant of economic advancement in the history of evolutionary economics (Udo et al., 2019). The notion of monetary deepening as a prerequisite for economic growth is central to the whole field of Macroeconomics (De Gregorio & Guidotti, 1995). However, as some scholarly publications suggested, this is not always the case (Bailey, 1956; Inoue & Hamori, 2016; Thakor, 1996). Given ECOWAS's recent attempts to promote more investment and trade in the sub-region for current and future economic development, it is becoming impossible to overlook the impact of financial development. In a nutshell, this study subject is timely. Today, many authorities are concerned about the general public's understanding of financial development and how financial

intermediation works (Azege, 2013). In another scenario, this study also looks at the ability to contact and communicate with financial institutions.

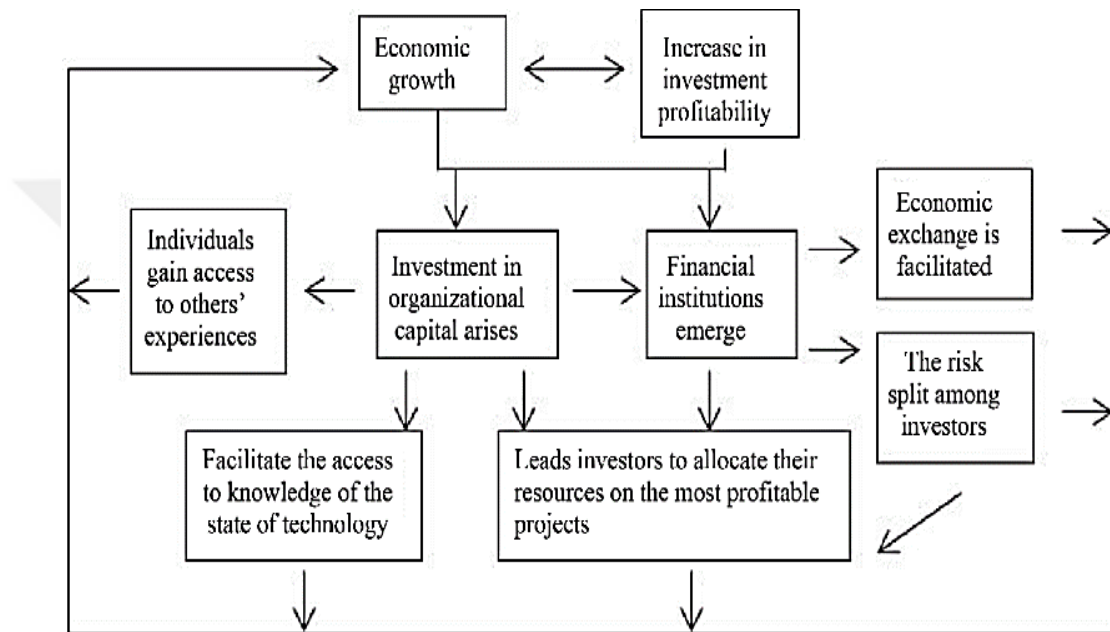
Several cross-sectional studies in Sub-Saharan Africa link economic growth and financial deepening (Azege, 2013; Jimoh et al., 2019; B. E. Udoh et al., 2021; O. A. Udoh, 2021). However, none of them has addressed the situation of ECOWAS member nations from the institution's foundation to the present (2020). Moreover, when quantifying and analyzing the association between financial development and economic growth, the problem of indicators for financial development has been a hotly debated topic (Darrat, 1999, 2002; Mohammed et al., 2021). Various variables were utilized in various research for special or general purposes (Corbett & Rostow, 1960). On the other hand, this research utilized four variables: economic growth, net domestic credit, expenditures, and trade openness.

To date, ECOWAS member nations have received much too little attention on the subject (Keho, 2020; Oloyede et al., 2021). What is not apparent is the effect of financial development on economic development in West African nations operating within the ECOWAS framework. Therefore, this research investigates the link between the subject's two elements: financial deepening and economic growth. The study also had two key goals: 1. It aimed to collect data that aided in filling these research gaps. 2. To identify applicable policies for regional economic development.

The World Bank database was used to acquire data for this quantitative analysis. This study offers a significant chance to increase knowledge of the problem in a new country with distinct economic cultures and attitudes toward financial intermediaries. Examining the problem prior to the foundation of the ECOWAS bloc is outside the scope of this research. The study's primary incentive for selecting this subject is that policymakers can consider those even informal sectors to deepen financial literacy. After reading the study subject, applying it to the West African community piqued the research interest.

This study hoped it would come up with factual findings and policy ideas. Could the findings have included that not only financial deepening is a prerequisite for economic development, but political instability, price stabilization, effective management of

fiscal deficit, and freedom of financial institutions? The term *financial deepening/development* will be used throughout this study to refer to the increased financial services offering (Darrat, 2002). At the same time, *how many products and services a person consumes each year is a measure of economic growth* (Corbett & Rostow, 1960). These two terms are sometimes used interchangeably with financial development, which is problematic in and of itself. For example, the table below depicts economic growth and financial development.



**Figure 1.1. Economic Growth and Financial Development**  
(Greenwood & Jovanovic, 1990)

## 1.2. Research Objectives

The major goal of this study is to evaluate how financial development variable such as net domestic credit has affected the performance of the gross domestic growth rate.

The precise goals are to:

- Examine if the financial development variable has impacted the GDP growth rate.
- Examine the level at which each independent variable affected the dependent variable.

### **1.3. Thesis Organization**

The results of this study are presented in four distinct parts. The first section, an introduction, explains the overall scope of the research. The second section starts by outlining the conceptual characteristics of the study and then examines how that literature relates to the research gap. The final part is on the approach that was employed for this research. The findings, conclusions, and suggestions are then presented.



## CHAPTER II

### LITERATURE REVIEW

#### 2.1. Economic Growth and Financial Deepening in the Regional Context

Financial deepening may impact a macro economic situation in some regions, but that may not be true in some instances (di Giovanni, 2005). The percent of the money supply to GDP or any other price index might rise due to financial deepening, and it has the potential to increase cash flow (Bakang, 2014; di Giovanni, 2005; Drambi et al., 2015; Obafemi et al., 2016). In essence, one can say that having cash can open up more possibilities for private-sector investment (J. M. Mwangi et al., 2016; L. W. Mwangi et al., 2014). When the financial sector is functioning properly, access to financing is increased; however, when it is not functioning properly, exposure to funds is decreased, and individuals are forced to be constrained by the allocation of their finances, forcing them to rely on informal lenders who charge high-interest rates such as money lenders (Oketch, 2019). When there are fewer economic activities that can be directly funded—and thus, when there is less overall economic growth—there will be less capital allocated, which will result in higher prices for those activities. Maintaining robust and long-term inclusive development through increasing financial depth in low-income countries may increase their resilience and ability to withstand shocks (Udo et al., 2019; B. E. Udo et al., 2021). Managing Volatility and Promoting Growth in Low-Income Countries Increasing the Efficiency of Macroeconomic Policies Shallow financial systems constrain fiscal, regulatory, and exchange rate policy measures, decreasing the overall effectiveness of macroeconomic policies (Loayza & Pennings, 2020). This is particularly problematic considering the sensitivity of low-income nations to exogenous shocks, such as huge fluctuations in the pricing of commodities and shifts in the amount of financing received from outside sources (Dabla-Norris et al., 2015). It is possible that, in general, considerable costs for growth and welfare will arise for these nations as a consequence of a lack of policy space and means to mitigate the consequent macroeconomic instability. The extent to

which economic growth and financial diversification are correlated has been the subject of a substantial amount of empirical study in the countries of Zambia, Nigeria, Kenya, Cameroon, and Ghana (Akinboade et al., 2002; Akinboade & Kinfaek, 2015; Bakang, 2014; Fadeyi et al., 2022; Ibrahim, 2015; Odhiambo, 2010). Because there is a significant positive correlation between economic growth and financial development, which is a significant benefit to both parties, many economists believe that financial development helps to fuel economic growth. This is because empirical evidence shows a significant positive correlation between economic growth and financial development. In theory, financial development can create growth-enabling conditions through either a supply-leading (financial development stimulates economic expansion) or a demand-following (economic expansion drives higher consumers' demand for financial products) approach. In the supply-leading model, financial development stimulates economic expansion. In the demand-following model, economic expansion drives higher consumers' demand for financial products (Gries, 2010). Despite the growing difficulty in identifying the causation between finance and growth, empirical evidence points to a connection between the two. There is substantial evidence to support the idea that the development of the financial system leads to an extension of the economic system (Mckay & Aryeetey, 2004). Many financial development indicators seem strongly and favorably linked to economic growth, both nationally and regionally. Liquidity of financial organizations' liabilities and equity and bond market capitalization are some examples of these metrics. (di Giovanni, 2005). Other studies have found a correlation between progress in the financial sector and growth in the industrial sector, and some advocates of the endogenous growth hypothesis, which contends that factors within an economy are the primary drivers of economic development, acknowledge the importance of finance in this context (Adams & Eschenbach, 2004). In the twenty-first century, the financial systems of developing countries became more inclusive, yet, they remained undiversified and relatively small (Lubin, 2018).

### **2.1.1. Middle Eastern Regions**

Several studies look at how nations in the Middle East, such as Turkey, the UAE, and Saudi Arabia, may be able to further their economic growth by diversifying their financial holdings (Darrat, 1999). The study aimed to discriminate between a broad

range of theoretical viewpoints by focusing on the causal connection between the degree of financial depth and economic growth. This was accomplished by examining the relationship between the two variables. The researchers used multivariate Granger-causality tests within the scope of an error-correction methodology. Financial deepening is a crucial causative aspect of economic progress, even if there is a wide variation in the quality of evidence among countries and proxies used to measure it. However, proxies used to measure financial depth do vary from study to study. The primary characteristic of the causal linkages is that they are stable over long periods. In addition, Darrat and Al-Sowaidi (2010) study the influence that information technology has had on the growth of the financial sector in Qatar, a nation whose economy is expanding at a rapid pace. According to the study's findings, Qatar's actual economic development over the long term is strongly connected to both the depth of its financial markets and the advancement of its information technology. However, the findings of the research indicate that improvements in financial development, rather than those in information technology, are more significant for boosting economic growth in the near term. This was discovered via a modeling strategy known as vector error correction and its accompanying short-run causal dynamics (Darrat, 2002). Ardic and Damar (2006) use data gathered at the province level for Turkey between 1996 and 2001 to examine the effect that the deepening of the financial sector has had on economic development. This evaluation can be found in Ardic and Damar (2006). (Ardic and Damar, 2006). The covered period happened simultaneously as a boom in the banking sector that was badly regulated or not controlled at all, which contributed to the financial crisis that took place in 2001. This rise in the banking industry occurred concurrently with the covered period. The authors' findings indicate a negative statistically significant association between the depth of public and private financial markets and the pace of economic growth. This relationship holds for both public and private markets (Ardic & Damar, 2006). The study's outcomes indicated that growing financial depth may not always benefit economic progress. In the future, it will be necessary to conduct a more in-depth investigation of the circumstances that exist when such a gift is made.

### **2.1.2. Europe and Related Regions**

Economic growth and financial market development are examined in Guryay and colleagues (2007) study (Apostolides et al., 2012; Karpuz et al., 2021). OLS was used to demonstrate that the expansion of its banking sector did not significantly influence Northern Cyprus' economic growth. The chain of causality switches from economic growth to financial development without any feedback mechanism. There has always been an intertwining of economic and financial development in India, Bangladesh, and Pakistan, according to Wadud (2005). Bangladesh is his primary focus. He referred to the broader economic structure as bank-based and capital market-based. A cointegration vector autoregressive model was used to study the long-term relationship between financial and economic growth (Wadud, 2009). Empirical data confirm the model's predictions about the relationship between financial and economic growth (Wadud, 2009). Using data from 1970 to 2000, Waqabaca (2004) examines the link between Fiji's financial and the country's economic growth. In this study, we look at the period between 1970 and 2000. The researchers used the unit root test and the cointegration technique in a bivariate VAR framework (Chandra et al., 2004). According to an empirical study, Fiji's financial development and economic growth have a positive association, with a causal relationship extending from economic growth to financial development. In order to strengthen the linkage between economic growth and financial development, the causal relationship between the two has been extended. According to him, this kind of thing happens in countries with far simpler financial systems than in ECOWAS member states (Chandra et al., 2004). According to research by Odiambho, South Africa's booming financial sector has influenced overall economic growth (2004). The study compares three distinct measures of financial development, all of which utilize real GDP per capita as a proxy for economic growth. The strong demand-following link between financial development and economic growth was empirically discovered using the cointegration theory and the vector error correction model. There is no basis for the supply-side argument in this study's findings (Odhiambo, 2004).

### **2.1.3. Sub-Saharan African Region**

Between 1986 and 2007, Nzotta and Okereke (2009) examined Nigeria's financial development and economic advancement. Financial deepening was linked to four of the nine variables analyzed, including lending rates, savings ratios, GDP ratios, and deposit money banks, using time series data and a two-stage least squares analytical framework. According to the report's findings, the financial system has not maintained a high degree of economic monetization and efficient financial intermediation (Nzotta & Okereke, 2009). Nigeria's economic progress between 1970 and 2005 was studied using Chukwu, and Agu (2009) modified Granger causality test established by Chukwu and Agu (Toda & Yamamoto, 1995). A favorable correlation between financial depth and economic growth was found in the findings of their co-integration analysis. Their research shows that Nigerian evidence supports the demand-following hypothesis regarding "bank-based" financial deepening variables like credit to the private sector and broad money, but they back the supply-leading hypothesis for bank-based financial deepening variables like loan deposit ratio and bank deposit liabilities. Consequently, bank-based financial deepening seems to modify the causal result.

Odeniran & Udejaja (2010) evaluate Nigeria's economic growth and banking sector development. In their study, which ranged from 1960 to 2009, they used Granger causality tests based on VAR. According to them, financial development may be gauged by looking at many ratios, such as the broad money stock to GDP, the net domestic credit, private sector credit, and bank deposit liabilities. Financial development and economic growth are linked empirically in certain cases in both directions as they continued. Their research found that several financial development indicators significantly influenced productivity even at a one percent significance level. A two-way causal relationship was identified between the increase in production and the increase in net domestic credit, indicating that the two are interdependent. According to the authors, deposit shock seems to have a minor impact on net domestic credit, as shown by the small contribution of deposit liabilities to total changes in net domestic credit. Shittu (2012) evaluated the impact of Nigeria's economic development on financial intermediation between 1970 and 2010. According to the research, Nigeria's economic development is strongly influenced by financial intermediation, an error correction model, and a cointegration test (Odeniran &

Udejaja, 2010). There is a direct correlation between the expansion of intermediate financial institutions and economic growth, according to Azege (2004). According to total deposits at banks, total credit extended by banks throughout time, and gross domestic product, there is a positive correlation between economic growth and financial depth. To him, the economic growth of Nigeria would be impeded until established financial intermediaries were in place (Azege, 2004). Researchers Olofin and Afangideh (2010) analyze Nigeria's financial system and economic development from 1970 to 2005 using annual data from 1970 to 2005. When looking at economic development, macro-econometric models were established to understand better how bank lending, investment behavior and economic growth all interrelate (Ohwofasa & Aiyedogbon, 2013; Udi et al., 2018). They employed three-stage least square estimation approaches for performing counterfactual policy simulations. According to the results of a developed financial system, expanding bank lending and investment activity leads to a rise in output. According to the study's results, bank loan and investment activities have little effect on output growth independently, but the expansion of the financial sector merely allows these activities to react positively to production growth. Aiyedogbon (2013) and Ohwofasa (2013, respectively).

Okoli (2010) inspects the association between Nigeria's stock market returns and volatility from 1980 to 2009. This research employs the widely-used GARCH model, which is well recognized. A total of four simulated equations were computed and reviewed by us. The ratio of market capitalization to GDP and the value of traded equities as a percentage of GDP was used to gauge the depth of the financial system. According to empirical data, stock market volatility has not been reported, and there is no fresh information on financial deepening. Market capitalization as a percentage of GDP, on the other hand, has an impact on the stock market. It has been shown that financial depth reduces stock market risk (volatility). According to the data, the volatility of returns is somewhat persistent as of 2010 (Okoli & Schabram, 2010).

Economic progress in underdeveloped nations has been investigated using time-series data from 1987 to 2009 by Sulaiman et al. (2012), who focused on Nigeria. An analysis of financial liberalization variables, including Gross Domestic Product as a function of loan rate, currency rate, inflation rate, financial depth, and degree of openness, is carried out using ECM (Error Correction Models) (Sulaiman et al., 2012). An

equilibrium link may be found in both the over-parameterized (95 percent) and the pared-down models, according to the cointegration results (91 percent). Consequently, the research concludes that Nigeria's economy benefits from financial deregulation. Joseph Schumpeter initially introduced the finance-led hypothesis in 1911 to examine the theoretical connection between the development of the financial sector and economic growth. (Sulaiman and colleagues, 2019).

According to one study, the economy's expansion can be attributed to investment, financial instruments, domestic savings, services, capital productivity, and effective information management. This is based on the hypothesis that the financial sector fosters the growth of the real economy sector through the process of financial intermediation. (Inoue & Hamori, 2016). These 27 middle-income countries, 28 African countries, and Namibia's economy benefited from financial development from 1970 to 2012. (Sanoh et al., 2014). There was "supply-led growth" in Nigeria and "demand-led growth" in Cote D'Ivoire, even though finance is a development engine in both countries. According to this research, countries with higher income levels had more supply-led development than economies with lower income levels, and the study also indicated that geographical characteristics and income levels enable variability, supporting the supply-led growth concept. Many factors influence theft, corruption and nepotism, and ethnicity in a country's micro-macro-economic and non-financial contexts. The second research rejected Schumpeter's theory of supply-led growth (B. E. Udoh et al., 2021; O. A. Udoh, 2021), which supported demand-led growth (Peyrot and Best, 1996) development of economic growth affecting financial sector expansion through macroeconomic activities. Trade openness and industrial output had a bigger impact on economic growth in Jordan than banking sector indicators, according to one research (Hye & Lau, 2015). Economic and financial stability and growth are discussed regarding the cause-and-effect links between finance and growth to decrease internal and external shocks and foster economic and financial stability and growth. Cross-sectional research policy design neglects several phases of development in a country's policy-making process. Researchers back up their arguments arguing that longitudinal studies can only be utilized in model nations and cannot be used in other economies to understand the dynamics of financial-growth financing (Swamy et al., 2019).

Consequently, studies conducted on a country-by-country basis will provide a more thorough understanding of how countries' economic and financial development differ. Cross-country research should not be utilized to investigate causality in one country but rather the "stages of development" it was stated (Mason et al., 2020). A key tenet of the growth-finance model is that finance increases growth in the early stages of a boom and decreases as the economy expands. The relationship between cause and effect varies by nation's development level. Current financial data support the Casino Neutrality Model. Economic progress may not necessarily follow financial progress. In 2011, the MENA and GCC countries observed neutrality. Economic development may be helped by factors other than those measured by financial statistics. Earlier studies relied on a linear model and financial sector data, ignoring non-financial sectors and structural breakdowns in those data owing to uncertainty, which is not the case with this research.

## **2.2. The Problematic Aspect of the Literature**

As a country's per-capita income grows, financial assets have been observed to outpace both national wealth and national production. This phenomenon has sparked significant interest among economists and policymakers, leading to the development of various theoretical perspectives on the role played by monetary and financial systems in fostering economic development. Understanding the relationship between per-capita income growth and the expansion of financial assets can provide valuable insights into the dynamics of economic progress, the functioning of financial markets, and the overall trajectory of a nation's economy.

### **2.2.1. Per Capita Income**

Financial assets grow faster than national wealth or national production as a country's per-capita income grows. Europe, Japan, and other developed areas have been used as examples of this general finding since their financial assets have grown far higher than their gross national product (GNP) (Honohan, 2009; L. W. Mwangi et al., 2014). The works of making this idea quite clear (Jao, 1976). According to the IMF, the US financial assets-to-GNP ratio has risen from about unity at the start of this century to 4.5 in the 1980s (Segers & Meier, 1995). According to Meier, Japan's GNP-to-assets

ratio jumped from 10% in 1885 to more than 150% in the 1980s. Put another way, as a country's wealth and income increase, so do its financial system, which becomes more affluent in terms of financial assets, institutions, and markets. Consequently, financial growth now often exceeds actual production growth in most developed nations.

### **2.2.2. Financial Systems**

There are several theoretical perspectives on the role that monetary and financial systems play in developing a nation's economy (de Serres et al., 2011). While economists feel it has little or inconsequential influence, other economists believe it has a substantial role. (Best et al., 2017), for example, it argues that the financial system does not contribute to the expansion of the economy; rather, it only reacts to the happenings in the actual world. On the other hand, some other scholars have highlighted the beneficial impact of financial systems on economic growth (Agénor & Pereira da Silva, 2012; de Serres et al., 2011; Ferreira da Silva, 2002; Thakor, 1996). King & Levine (1993) and De Gregorio & Guidotti (1995) show persuasively that banking development indices are substantially connected with economic growth. Furthermore, they agree that a better-functioning financial system is essential for lasting economic prosperity (Lavine et al., 2011).

Both Fishkin et al. (1973) and FRY (1988) made significant contributions to the research on financial deepening, largely concerned with examining the relationship between financial deepening and growth in developing countries. Two factors contribute to economic growth: first, the increase in real money balances and second, the level of financial development or intermediation. Economists such as Shaw (1973) and Jao (1976) conducted worldwide empirical investigations to support these claims (1986).

### **2.3. The Indicators**

The relationship between the economic outlook and the market is a crucial area of study, particularly in Sub-Saharan African member nations. While multiple studies in this region may converge on the same conclusion regarding this relationship, the

variables used to measure the subject matter can vary significantly across studies. This diversity of approaches highlights the complexity and multifaceted nature of the economic landscape in Sub-Saharan Africa, necessitating a comprehensive exploration of the various variables employed to assess the impact of the economic outlook on the market.

### **2.3.1. Economic Growth**

The economic outlook significantly impacts the market (Inoue & Hamori, 2016; Pagano, 1993; Yang & Hamori, 2021). Experts carefully examine the economy because it influences their recommendations for which sectors or stocks to suggest and indicate where to invest (Obafemi et al., 2016). For example, a thriving economy would employ various trade approaches than a failing economy. In the academic literature and beyond, several indicators of economic growth help analysts understand the phenomena (de Serres et al., 2011; Pagano, 1993; Rateiwa & Aziakpono, 2017; Udo et al., 2019; Wadud, 2009).

First, if inflation remains constant at the required level of 2-3%, it can demonstrate that the economic system is on a path to solid economic progress (Aghevli & Khan, 1977; Tanzi, 1978). Second, if inflation rises, buyers will have less extra cash to spend on goods. If consumers cannot splurge, GDP growth will be hampered (Corbett & Rostow, 1960; Pagano, 1993). Third, low inflation can indicate economic weakness (Tanzi, 1978). Rising unemployment or declining consumer esteem reduces customer demands, preventing prices from soaring (Aghevli & Khan, 1977; Bailey, 1956).

Second, a rise in the Gross Domestic Product is required to see economic growth (GDP). This idea can happen due to increased consumer expenditure or increased product production. Their disposable income can influence consumer spending. As a result, unemployment statistics are a critical metric for determining whether or not the economy is healthy. When joblessness and layoffs are high, citizens have much less money to buy additional products and services. Because there is less demand for goods and services, more businesses will keep struggling, lowering GDP. Another consequence of high levels of unemployment and job cuts is that individuals who are still hired may feel insecure in their positions. This problem may deter them from

spending any money and encourage them to save if they lose their jobs. Naturally, it will harm GDP. (Greenwood & Jovanovic, 1990; Udi et al., 2018).

Third, rates of interest being raised indicate that the economy is improving. Interest rates are lowered to grow the economy by simply making borrowed money more accessible, allowing consumers to spend more cash. Low-interest rates enable firms to take out loans and put money into their operations. When borrowing costs are raised rather than lowered, the economy is heating up, sometimes too quickly, because increased interest rates are supposed to slow things down. (Darrat, 2002).

Fourth, wage growth is required to meet the level of inflation. Consumer demand is responsible for economic expansion. On the other hand, consumer purchasing power is directly related to income earned. If customers do not have enough disposable income to spend, demand will not rise. Wage growth can follow productivity and competitiveness without raising businesses' actual labor costs. Real wages follow a thriving economy as invested capital and production increase. Due to low wages, there is a scarcity of demand for goods. Wage growth is evidence that economic growth has improved. (Greenwood & Jovanovic, 1990).

Fifth, the real estate industry contributes significantly to the economy. For example, building a house necessitates products and services from various industries, including construction projects, materials, refurbished and new home furnishings, appliances, and electronics. As a result, building a new house generates significantly more spending on goods and services than selling an existing home. As a result, new home construction can boost GDP by increasing the demand for goods and services. (Tanzi, 1978).

Sixth, household consumption accounts for the majority of most of the economy. Higher spending leads to increased output, which boosts GDP. Even before statistics are published, the retail trade report can be used to forecast GDP. When retail sales increase by 3% or more, the economy is considered sturdy. (Odhiambo, 2010).

Finally, manufacturing and production studies demonstrate vital information about a country's economic output, so advanced industrial production is a good indicator of a

growing economy. As commands for goods rise, an increase in production output can signal a reinforcement economic system. In addition, consumer preferences contribute to a high GDP number, and production growth statistics can help economists assess this. (Segers & Meier, 1995).

### **2.3.2. Financial Deepening**

In Sub-Saharan African member nations, these studies may all lead to the same conclusion, yet each study may use different variables to measure the subject matter (Ohwofasa & Aiyedogbon, 2013). Bank deposit debt to nominal GDP is employed to measure financial deepening in research, and the link between real per capita income and this ratio is modeled (Bakang, 2015). In certain cases, the approximation methods of SOLS and DOLS are applied. However, adjustments to the metric may be made to account for financial liberalization and repression. A little effect on the real interest rate may be seen in certain research; nevertheless, the results of these investigations are inconsistent (Akinboade & Kinfack, 2013). Sometimes the real interest rate has a detrimental influence on financial deepening, whereas it has a favorable impact on financial development during monetary repression and financial liberation periods. During financial liberalization, the relationship between financial deepening and economic development in some Sub-Saharan African nations was surprisingly negative and substantial, while it was negligible during periods of financial repression in the same countries (Inoue & Hamori, 2016). Although financial depth and economic growth seem to be unconnected, the findings of the causality tests show otherwise.

Another reason for doing so is that, as the quantity of financial assets increases, it is necessary to develop metrics for measuring the whole range, from money to stocks to bonds to gold (Patrick, 1966). Finding these financial assets, computing their worth, and then putting them all together will be necessary. Total financial assets are one broad indicator of financial depth, while per capita real money balances are another. Non-bank financial assets, treasury bills, the value of shares, and money market funds have all been studied in the literature (Bridges et al., 2011). Financial deepening may be measured by comparing the total value of these financial assets to this statistic.

Some of these financial assets are difficult to collect data on, but integrating them to form an overall measure of financial depth is not, as previously discussed in comparable research (Honohan, 2009). Many sub-Saharan countries lack access to data on the value of stocks and money market funds because of their small and undeveloped capital markets (Udoh et al., 2021). Obtaining year-to-year data on all financial assets, save for large sums of money, is almost impossible. The degree of financial intermediation, a critical component of financial deepening, would have been equal to the sum of these financial asset assessments if the data had been available. Problems obtaining data for this and other research in Africa are widespread.

Financial deepening grounded on such identification is extremely improbable to catch a significant number of ECOWAS nations' capital markets, which should be considered to avoid measuring future errors (Udoh et al., 2021). So when compared to advanced economies, these countries' market capitalization as a percentage of GDP is low (Nyong, 1996). This may be because many companies in ECOWAS do not have a public stock exchange listing. When it comes to capital investment in Nigeria in the 1970s, just 5% of it came from the capital market (di Giovanni, 2005). Some studies utilize broad money as a surrogate for financial depth because of the lack of data. Jao (1976) found that the degree of monetary intermediation and the growth rate of per capita real money balances are the two variables that best characterize financial deepening.

Many economists define financial intermediation as how financial institutions link deficit and surplus expenditure units. The combination of spending units is expected to increase the financial system's depth (Ghani & Ejaz, 1992; Pagano, 1993). Put another way, the financial sector will make greater investments in the economy. If an economy's financial superstructure helps get money to the best user, i.e., where it is most productive, its economic performance will be accelerated. (Ghani et al. 1992) They believe that financial intermediation promotes development by allowing for a higher return on capital, allowing for the deployment of more expensive financial structures (Greenwood & Jovanovic, 1990). Financial development/intermediation may contribute to long-term economic growth, according to Montiel (1996), who argues that growth and financial development are mutually reliant.

There are numerous ways in which monetary development might affect actual production growth. Marc et al. (1970) and Bencivenga & Smith (1991) pointed out that increasing investment volume and improving savings amount and structure are important. In order to have an impact on actual production growth, the following are the key methods in which financial development may be (Fry, 1988; Fry, 1978). Growth is predicted to be aided by financial development since it will improve investment efficiency via better project selection, new ideas, and a rise in new business ventures, according to Greenwood and Jovanovic (1990) and King and Levine (1991). Several modern endogenous growth models place much focus on this. Endogenous growth may be affected in the long term by various other variables outside only the financial ones. We will take a close look at all of these factors. As we are aware, the consequences of fiscal policy may be studied using various methods. For one, inflationary taxes and financing are critical; for the other, the fiscal deficit or balance is crucial.

Inflationary taxation is the subject of some investigation. Researchers say that inflationary taxes may support investments in rising nations when all resources have been used (Aghevli & Khan, 1977; Bailey, 1956; Tanzi, 1978). In the 15 ECOWAS countries, full employment is not a reality. It may not have the intended effect on economic development and growth due to inflationary taxes via investment. On the other hand, the fiscal deficit has been detrimental to long-term growth (Easterly et al., 1994). According to some studies, selling government assets to the central bank to make up for the fiscal deficit would lead to inflationary taxes and financing since it would cause the currency's value to increase. In several developing ECOWAS nations, borrowing from the central bank to monetize debt or deficits is common (Klein & Neumann, 1990).

The devaluation of a currency often results in a decrease in the buying worth of the native currency, meaning that those who retain the currency lose out on the real products and services they are paying for. Gold, physical goods, land, and foreign currency are the major investments made by sane economic operators. This fourth alternative, maintaining foreign money, underscores the necessity to do a cost-benefit analysis of dollarization to understand how it impacts development and growth in the long term. An autonomous nation would want to evade paying seigniorage to an

overseas authority if there were no transaction expenses. Using foreign currency will necessitate paying seigniorage if transaction expenses are high. Growth and development will be harmed by seigniorage, a cost that arises from high demand for foreign currency (Fanelli & Medhora, 1998; F.S. Mishkin & K. Schmidt-Hebbel, 2001; Klein & Neumann, 1990). In contrast, seigniorage may have a beneficial impact on growth if the research of dollarization yields benefits.

In the 1990s, several studies were conducted to examine the factors that impact long-term growth. Among the most significant were Easterly and Levine's inquiries (1994). For cross-country growth regression, they found several relevant explanatory variables, including (1) a measure of black-market premium; (2) a measure of financial development; (3) a measure of openness, i.e., the GDP-to-exports ratio; and (4) a measure of inflation. According to Easterly and Levine, several factors, including inadequate education, political instability, an undeveloped fiscal sector or shallow financial depth, and a substantial black-market premium, negatively influence long-run endogenous development. There are many problems with ethnic diversity and racial divisions. Spillover from nearby properties exacerbates each of these problems. Long-run endogenous growth studies by Easterly et al. (1994). They have also been shown to be useful in certain cases.

### **2.3.3. Financial Development**

The variables this study used in the thesis were GDP growth to indicate economic growth and Net Domestic Credit to represent financial development.

According to Hassan et., al (2011), different measures have been previously used in literature to proxy for financial development levels and economic growth. In their study, they collected proxy measures for financial deepening and economic growth from the World Bank's Development Indicators 2009 for the period 1980 to 2007. In their research, they used GDP growth rates as a proxy for economic growth. For the financial development, they used six variables to measure the financial deepening from which this study choose net domestic credit expressed as a percentage of the GDP. From the literature, it is clear that higher domestic credit implies higher financial development since the banks are most likely to give financial functions as discussed

in Levine (1997). This study also chose trade openness which was also used in the paper. From Levine's study, we see that countries rely on international trade to achieve economic growth.

This study chose expenditure as a fourth variable since in the Hassan et., al study, it was discussed that trade and government expenditure plays a vital role in explaining economic growth (Hassan et al., 2011).



## **CHAPTER III**

### **METHODOLOGY AND APPLICATION**

This section presents the methodology employed to address the main objective of the study. It begins with the research scope of the methodology employed in the research study, variable description and data analysis.

#### **3.1. Scope of the Research**

The data used in this research is yearly and spans the whole 15-nation ECOWAS region from its founding in 1975 through 2020. In this study, the effect of financial development on ECOWAS member nations' economic growth is examined. The research also looks at government expenditure on economic growth, net domestic credit, and trade openness. Secondary sources of data were utilized for this study. The World Bank provided information on the financial development and economic growth of Sub-Saharan nations, and this study extracted the data for those that are ECOWAS member states. This information is trustworthy because, in contrast to other international organizations, the World Bank has a competitive advantage over them by being able to access a wide variety of resources from both the public and private sectors (Keho, 2020). Additionally, the databases of the World Bank offer crucial managerial options and important statistical information (Adebisi et al., 2020).

#### **3.2. Methodology and Data Arrangement**

This study adhered to the fundamental principle of gathering information from a single, authoritative source. However, the variables were divided into dependent, independent, and control factors after the raw data was extracted from the World Bank database. Second, the countries included in this study were solely justified by their status as formal ECOWAS members as of December 31, 2020. Table 1 lists the ECOWAS member nations, the date they joined the union, and their present status.

With the exception of Cape Verde, which later joined, all of the member nations in the table were ECOWAS's formal members as of the organization's founding in May 1975. However, up until their withdrawal in 2000, Mauritania was a founding member of the organization.

**Table 3.1. ECOWAS Member Countries and Their Status into the Union**

<i>No.</i>	<i>Country name</i>	<i>Date of inception</i>	<i>Current status (30.09.2022)</i>
1	Benin	From inception	Active
2	Burkina Faso	From inception	Suspended
3	Cape Verde	1977	Active
4	Gambia	From inception	Active
5	Ghana	From inception	Active
6	Guinea	From inception	Suspended
7	Guinea-Bissau	From inception	Active
8	Ivory Coast	From inception	Active
9	Liberia	From inception	Active
10	Mali	From inception	Suspended
11	Niger	From inception	Active
12	Nigeria	From inception	Active
13	Senegal	From inception	Active
14	Sierra Leone	From inception	Active
15	Togo	From inception	Active

### 3.3. Definition of Research Variables

In this study among dependent, independent and control variables, four variables were used and below is a short explanation of them.

- a) Gross Domestic Product (GDP) growth rate (annual percent) is GDP's yearly percentage growth rate dependent on fixed local currency and market prices. The prices used to calculate the aggregates were consistent throughout 2015 and were given in US dollars.
- b) The present level of net domestic credit (LCU-Local Currency Unit) is equal to all domestic net claims, including claims on other parts of the domestic

economy and the central government. The data are presented in the most recent available local currency.

- c) Government Expenditure (percent of GDP). These expenses are monetary payments made by the government for its operational operations, which include the provision of products and services. It comprises remuneration for workers (such as salary and wages), grants, interest, subsidies, social benefits, and other costs such as dividends and rent.
- d) Trade is defined as the sum of all commodities and services exported and imported, expressed as a ratio of GDP. Trade may be broken down into two categories: international and domestic.

### **3.4. Dependent Variables**

- **Gross Domestic Product (GDP)**

Numerous variables, such as the rate of return, the size of the monetary aggregates, the ratio of the financial system's magnitude to GDP, and net domestic credit, have been used in studies as proxies for the financial development measurement (Chuah & Thai, 2004; Al-Awad & Harb, 2005). Although GDP rates of growth have mostly been used as a stand-in for GDP (Al-Awad & Harb, 2005). For this master's thesis, the World Bank's database's proxy variable for financial development and economic growth was examined in the case of this study. Growth rates of GDP per capita were used in the research as a proxy for economic growth. The study did acknowledge that there are several approaches to measuring GDP growth. Throughout this study, GDP is used as the dependent variable.

### **3.5. Independent Variables**

- **Net Domestic Credit (NDC)**

The first step in determining measurement for financial development in this study was to construct a proxy of 'net domestic credit' granted as a percentage of GDP for it. An increase in domestic credit is seen to indicate a tendency to rely on the banking system for finance. In another sense, higher domestic credit levels imply higher financial

deepening, as lenders are more likely to handle some financial responsibilities listed in Levine (1997). It is believed, however, that lenders are not forced to retain government bonds that could not be suitable for emerging nations or to make mandatory credit to priority businesses. An increased domestic loan ratio is also believed to indicate increasing levels of internal spending as well as finance industry expansion. For monetary institutions that lend more money to the private industry, a greater degree of financial development is required since these procedures are now more inclined to do investigation on borrowers' companies, undertake corporate influence, offer risk management control, ease operations, and organize deposits (Levine, 2005). This study uses NDC as an independent variable.

### **3.6. Control Variables**

- **Government Expenses**

This study utilizes government expenditure as a control variable. Government spending was designated as a control variable because it had an impact on economic growth in one way or another. Government spending can have a good or negative impact on economic growth. That is so because tax and other revenues are used to pay for government spending. It is a widely held belief that long-term economic growth is inevitable when a government spends money on large-scale projects like constructing bridges, roads, and effective transportation networks. However, if governments spend more on debt payment, it does not necessarily result in economic development; instead, it might increase the amount of government borrowing available for capital goods. More specifically, government spending has a negative influence on long-term economic growth when paid by tax revenues; but, when funded by other sources, such as non-tax revenues and budget surplus/deficit, it has a positive effect.

- **Trade Openness**

The relationship between economic progress and trade openness is still a popular issue in both philosophical and specific roles. This issue has gained far more prominence in recent years because of the continued and persistent differences in financial stance among economies, primarily among developing countries as a result of enhanced

global trade interconnection. Similar to this, there have been numerous, occasionally contradicting, opinions about the weighting factor of various economic, and strategic approaches, and circumstances that could explain the distinctions. These variabilities in the documenting pathways between many emerging markets are communicated within the research paradigm, identity, and patterns of interaction of their successful integration into the global financial system. This topic has become even more contentious because developing economies have adopted similar trade and economic reform strategies from the beginning of their transformation. As a reason, it is not unexpected that opinions on the outcomes of trade liberalism vary and are hotly debated in academic and foreign policy circles.

### **3.7. Data Analysis**

To begin with, analysis of panel data was used throughout the duration of the investigation. According to the research, there is a compelling case for employing the panel data analysis approach. The cross-sectional and time-series nature of the research data is one of the causes. Professional debate on method analysis study designs has emphasized their effectiveness, thoroughness, and dependability. In this analysis, the sample size (N) and (T) stand for vertical time - series data and the horizontal cross-section, respectively. In a further stage of the research, the study examines the 45-year association between the GDP growth and net domestic credit of the ECOWAS countries. This research is conducted by aggregating information on a country that is our cross-sectional since panel data are being used. The reader should keep in mind that, as Gururati (2003) pointed out, panel data categorization is pooling, longitudinal, and multidimensional. The data in this study, however, is regarded to be a macro panel because it covers 15 nations over a 45-year period.

Therefore, N represents the number of ECOWAS countries and T represents the time period upon which data was used. For instance, (T=1975 to 2020) and (N=15).

Panel data, often known as longitudinal data, is a type of data that includes observations on various cross sections across time. Examples of the types of groupings that can constitute panel data series are countries, businesses, people, or demographics categories. Panel data also includes observations that were sequentially gathered at

periodic times, just as time series data. Like cross-sectional data, panel data includes observations made across a group of people. Below are some more advantages of using panel data.

- Panel data may be used to simulate both the typical and unique behavior of groups.
- Compared to cross-sectional or basic time-series data, panel data is more efficient, more variable, and more informational.
- Mere time series or cross-sectional data cannot identify or quantify statistical effects, however, panel data can.
- When groups are combined into a single time series, estimate biases may occur. Panel data helps reduce these biases.

After organizing the raw data and making it ready for analysis, making sure is strongly balanced is a requirement. The data was strongly balanced as seen below, which implied that all countries have all the data for all the years ( $n=N \times T$ ).

Panel variable: countries (strongly balanced)

Time variable: Year  $t$  (1975 to 2020,  $\Delta =$  yearly)

Delta: yearly

- **Balanced Panel Data of ECOWAS Member States**

To choose the most suitable regression model employing panel data for this research, a straightforward linear regression panel model is used, as shown in Equation 1 below. The dependent variable is denoted by  $y_{it}$ , the independent variable by  $X_{it}$ , and the coefficients by  $\beta$ . The error term ( $\varepsilon_{it}$ ) is decomposed into two components:  $\alpha_i$ , representing the individual-specific effect captured by panel data, and  $v_{it}$ , representing the unique error term.

$$y_{it} = \beta_0 + \beta X_{it} + \alpha_i + v_{it}, \text{ where } i = 1, 2, 3, \dots, N \text{ and } t = 1, 2, \dots, T \quad (1)$$

The error term  $\varepsilon_{it}$  can be written as:

$$\varepsilon_{it} = \alpha_i + v_{it}, \text{ where, } i = 1, 2, \dots, N \text{ and } t = 1, 2, \dots, T \quad (2)$$

To pick the effective model estimation for the hypothesis test, a model selection test is carried out. The Hausman test reveals whether such a Fixed Effects model over a Random Effects model fits the data the best, according to Baltagi (2005). When deciding between Random Effect (RE) and Fixed Effect (FE) Models, the Hausman specified statistical method has been routinely used. For the Fixed Effect and Random Effect models, Hausman (1978) presupposes that the null hypothesis coefficients are consistent. The FE model is ineffective, though. Only the FE framework and the RE model exhibit consistency for the coefficients in the alternative hypothesis. The unaccounted variance in the single components is eased or eliminated in a FE linear regression. To calculate the predictors' overall impact, FE lowers the impact of moment single traits on the predictors. Equation 3 following defines a linear fixed-effect model equation in a more generic sense.

$$Y_{it} = \beta_{0it} + \beta_{1it}X_{it} + \beta_{2it}X_{it} + \beta_{kit}X_{it} + u_{it} \quad (3)$$

Where:

$$u_{it} = \alpha_i + \varepsilon_{it}$$

$$\beta_{1it} = \beta_1 ; \beta_{2it} = \beta_2 ; \dots ; \beta_{kit} = \beta_k$$

The RE regression analysis, in contrast to the fixed effect model, posits the randomness of the single time constant variability among single components. If there is strong evidence that the various unit-specific traits influence the regressors in some way, the random effect is regarded as suitable. Equation 4 below defines a linear random-effect model equation in a more generic sense.

$$Y_{it} = \alpha_{0it} + \beta_{1it}X_{1it} + \beta_{2it}X_{2it} + \beta_{kit}X_{kit} + \mu_{it} + V_{it} \quad (4)$$

Where:

$$\mu_{it} = \mu_i + e_{it}$$

White noise is represented by  $e_{it}$  and undetected individual-specific impact by  $\mu_i$ .

It is important to keep in mind that  $\mu_i$  is essential for distinguishing between FE and RE models. The unobserved individual traits of the various units are measured in  $e_{it}$ .

The FE model fits the data the best when the unseen elements and independent factors are linked. However, the RE model is advised for use where there is statistically

independent heterogeneity with independent factors. By eliminating (unobservable) first from the error term during model estimation and then under the fixed premise effects, the associated unobserved heterogeneity issues are also resolved. In other terms, since it is impossible to know for certain that all important control variables are contained within a simple OLS model, Fixed Effect model estimates offer a solution for missing variable bias. Regression using a fixed effect model, which makes the claim that these unobserved individual attributes do not change over time, will avoid variable bias being omitted. We may evaluate the true impact of the determinants on the predicted variable by removing the impact of those time-invariant attributes using FE. When examining the impact of economic growth on financial development flows, for example, there is one dependent variable and two control variables.

- **Results of the Hausman Test for Fixed Versus Random-Effects Model**

The hypothesis is as follows:

*H0: Fixed Effects model is a better fit*

*H1: Random effects model is a better fit*

Prob>chi2 = 0.1076

From the test, we clearly see that the P-value is 0.1076 which is greater than 5% and thus we fail to reject the null hypothesis and conclude that the fixed effect model is a better fit for this data than the random effect model. Therefore, the best performing model for this panel data is the Fixed Effects model.

The study indicated a final fixed effect model, as indicated in equation 5, to quantify the influence of financial development on GDP growth:

$$GDP_{it} = \alpha_{0it} + \beta_{1it}NDP_{it} + \beta_{2it}GE_{it} + \beta_{3it}TO_{it} + u_{it} \dots \dots \dots (5)$$

where:

*i* represents the *i*th ECOWAS member state (*i*= 1 ... 15), *t* stands for the *t*th year (*t*= 1975 ... 2020). *x<sub>it</sub>* stands for the study's independent variable with respect to ECOWAS member state *i* & year *t*.  $\beta$  – is a metric that describes how various variables

can influence GDP growth.  $\beta_{1it}NDC_{it}$  measures net domestic credit volume of  $i$  country.  $\beta_{2it}GE_{it}$  measures the government expenditure in country  $i$ .  $\beta_{3it}TO_{it}$  assesses trade openness  $i$ . Moreover, STATA was the statistical software used to carry out the analysis of this study.

Certain requirements must be met by the data in order to avoid a misleading regression of our model. These requirements are validated by several tests. The set of exploratory tests performed before the final estimate of the study's framework also allows understanding of the characteristics of the data or factors with which we are interacting. These tests are described and detailed below.

- **Descriptive Statistics**

The type of database this study is operating with is clearly shown via descriptive statistics. As a result, this study provides knowledge on the data's statistical significance, dissemination, and degree of normalcy.

- **Correlation Analysis**

The degree and orientation of the linear relation between two variables are described by correlation analysis. A correlate is significantly dependent on whether the coefficient of correlation is favorable or unfavorable. When the coefficient is 0, there is no correlation between the two factors. The degree of the link is determined by the coefficient value. Stronger and weaker correlations are shown, accordingly, by higher and lower values.

- **Analysis of Cross-Sectional Dependence**

To determine the degree of interdependence between the nations under consideration, a cross-sectional dependency test is conducted. Interdependent nations experience spill over effects from financial or political shocks. It is assumed that a shock in one nation would spread to another when there are close economic or political ties. This test is extremely important since it helps build fitted estimators and decides whether to use a

first-generation or second-generation unit root test. It is preferable to use a second-generation unit root if there is a cross-sectional dependence. The individual difference presumption is relaxed, and country dependency is considered by the second-generation unit root test. Different cross-sectional dependence tests exist, relying on the panel data format. Breusch-Pagan 1980 is recommended when  $T > N$ , whereas other tests are used when  $T < N$ . The Breusch-Pagan LM, Pesaran scaled LM, and bias-corrected LM tests are a few examples of the different cross-sectional dependency tests. As a result, numerous Cross-section dependence tests are used in this work. The numerous analyses disprove the null hypothesis that cross-sectional independent holds.

- **Panel Unit Root Test**

To ascertain whether the factors' variables are stationary, this analysis is performed. The results of the cross-section dependence test will determine the sort of unit root test to use, as was already explained. If the variables remain cross-sectionally neutral, a first-generation unit root is used; if the factors are cross-sectionally interdependent and take into consideration cross-section fluctuations, a second-generation unit root is used.

### **3.8. Limitation**

Readers should be aware that the study's focus is only on ECOWAS member nations. However, since the community's founding in 1975, certain member nations have been accepted while others have departed.

## CHAPTER IV

### RESULTS

#### 4.1. Summary of the Statistics

Prior to beginning with the regression analysis, it is critical to do descriptive statistics to obtain the summary of the research data set. Tables 2 show the summary statistics for the data. In the case of ECOWAS member states, trade openness and GDP have the highest mean values of 52.4265 and 3.393067, respectively. Net domestic credit and government expenditure had the lowest mean value among these factors.

**Table 4.1. Summary of the Four Main Variables**

<i>Variable</i>	<i>Obs.</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
<i>GDP growth</i>	690	3.393067	5.099928	-30.14513	26.41732
<i>Net Domestic Credit</i>	690	1.27e+12	4.15e+12	-115138.3	4.26e+13
<i>Government expenditure</i>	690	2.709863	6.315038	0	30.24272
<i>Trade openness</i>	690	52.4265	26.77833	0	140.8602

#### 4.2. Correlations Analysis among Study Variables

In order to understand the relationship between the financial development variables and economic growth, a correlation analysis was conducted. From the correlation analysis, it is clear noting that, the financial development variable in our question has a positive association with the economic growth of ECOWAS member states. The degree of associations however differs from one dependent and control variable. The trade volume to GDP ratio has the highest correlation implying that its effect is greater on the economic development of these countries. Net domestic credit (LCU) has the least correlation with economic growth. Its effects thus are lesser compared to the other financial development variables. However, since the main question of this research is if financial development has any sort of relationship with economic growth, therefore, this study can clearly claim that a relationship exists, with other factors held constant.

The second research issue was how much the study's dependent and control variables impacted the independent variable if any. Some of those factors are the control variables like the government spending and trade openness of any ECOWAS member states which have a stronger correlation with the GDP.

**Table 4.2. Correlation Analysis**

	<i>GDP growth</i>	<i>Net Domestic Credit</i>	<i>Government expenditure</i>	<i>Trade openness</i>
<i>GDP growth</i>	1.0000			
<i>Net Domestic Credit</i>	0.0446	1.0000		
<i>Government expenditure</i>	0.1308	-0.0113	1.0000	
<i>Trade openness</i>	0.2173	0.0398	0.3510	1.0000

### 4.3. Cross-Sectional Dependency

Additionally, the study's data is free from multicollinearity since VIF values are less than 10 indicating the absence of multicollinearity. In other words, the independent variables are not highly correlated which could create problems for the analysis results. Also, there is strong evidence that the null hypothesis would be rejected. If the likelihood is more than 5%, we cannot rule out the null hypothesis. According to this paradigm, the distinctive characteristics of particular cross-sections remain constant across time. Moreover, it takes into account the fact that the individual dependent variables in the cross-section are unrelated to these characteristic traits.

We can also see from the random effects model that every variable coefficient has a positive sign, indicating that it has a positive influence on the dependent variable. We see that net domestic credit and cost are statistically negligible in predicting GDP growth when examining the importance of the variables from the p values. However, trade openness is important since it has a p-value that is less than 0.05, or 0.000.

To summarize, the research results clearly demonstrated that, of the three variables ( $Y_{it}$ ) with one reflecting financial development for real economic growth to occur, trade, which is a control variable in this study, should be given much attention because it has the strongest correlations to the dependent variable ( $X_{it}$ ). However, anytime commerce is discussed, there are many things that are excluded from the scope. One of these features is the economic activity carried out along the ECOWAS border. To summarize, this study does not indicate that central governments in ECOWAS member nations should not exercise caution when it comes to net domestic credit. However, as compared to government spending and trade, net domestic credit is the least significant.

#### **4.4. Unit Root Test**

The panel unit root tests support the hypothesis that all variables are interdependent. The cointegration of trade openness, economic growth, and the differences between net domestic credit and expenditure are all taken into account to arrive at a precise result. As mentioned above, there is a strong correlation between trade openness, energy use, and economic development. A correlation between expenditure and trade prices, on the other hand, has been documented. The study of causality shows that economic progress and expenditures, commodity consumption, and openness to trade in the ECOWAS states are linked.

#### **4.5. Results from the Fixed and Random Effect Model Estimation**

As two models are fitted, it is good to evaluate the model that performs the best with the panel data. In order to do that, this study conducts the Hausman test to choose the best performing model.

- **Hausman Test for Fixed Versus Random-Effects Model**

The hypothesis is as follows:

*H0: Fixed Effects model is a better fit*

*H1: Random effects model is a better fit*

**Table 4.3. Hausman Test of Fixed versus Random-Effect Model**

	(b)	(B)	(b-B)	$\sqrt{\text{diag}(V_b - V_B)}$
	fixed	random	Difference	S.E.
<i>Net Domestic Credit</i>	4.19e-14	4.68e-14	-4.86e-15	2.12e-14
<i>Government Expenditure</i>	.0268667	.04582	-.0189533	.0127863
<i>Trade Openness</i>	.0529348	.0392201	.0137148	.0075792

b = derived from xtreg; consistent under H0 and H1

B = inconsistency in H1, efficiency in Ho; xtreg

Hypothesis: H0: There is no systematic difference in coefficients.

H1: There is no systematic variation in coefficients.

$$\text{Chi2}(2) = (b-B)'[(V_b - V_B)^{-1}](b-B)$$

$$= 4.46$$

$$\text{Prob} > \text{chi2} = 0.1076$$

From the test, we clearly see that the P-value is 0.1076 which is greater than 5% and thus we fail to reject the null hypothesis and conclude that the fixed effect model is a better fit for this data than the random effect model. Therefore, the best performing model for this panel data is the Fixed Effects model.

- **Breusch and Pagan LaGrange Multiplier Test for Random Effects**

According to the results of our empirical research, none of the variables can be considered steady in their level form. However, after the initial difference, each series reaches a stationary state. Therefore, at a significance level of one percent, we infer that the null hypothesis of non-stationary cannot be supported, and we draw the conclusion that all sequences in the panel of 15 nations are integrated into order one.

Estimated values of test statistics obtained from estimation methods that pooled the autoregressive coefficients over many cross-sectional for the root test on the

estimate residuals are included in the statistics inside the dimension. These estimated values are included in the dimension's statistics. These approximate values may be found within the statistics that pertain to the dimension. The predicted values of statistical tests based on estimation methods that aggregate separately calculated parameters for every cross-section are shown in between dimensions. These values are compared to the test statistics. These estimation methods calculate the statistic values based on the relationship between the two dimensions. The tests conducted within dimensions and those conducted across dimensions indicate that the null hypothesis stating that there is no cointegration may be rejected in most instances. Therefore, in our chosen panels of ECOWAS nations for 1975–2020, net domestic, expense, trade openness, and GDP growth are all cointegrated. Using data from 15 ECOWAS nations from 1975–to 2020, this study investigates the link between trade openness, expenditures, economic growth, and net domestic credit. The period covered is 1975–2020. In order to do this, the study used panel unit root tests to investigate the integrating qualities possessed by the variables. In order to investigate the phenomenon of cointegration amongst variables, The study used both the cointegration and likelihood-based panel cointegration methodologies. Investigating the direction of causation between variables in the ECOWAS nations using the Granger causality is one of the methods that may be applied.

#### 4.6. Regression Analysis Results

The regression analysis results are presented in Table 4.4, which shows the coefficients, standard errors, t-values, p-values, and confidence intervals for the variables included in the model. The table provides insights into the relationship between the independent variables and the dependent variable.

**Table 4.4. OLS Regression Results: Relationship between Variables**

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
Net domestic credit	4.19e-14	5.15e-1	0.81	0.415	-5.91e-14 1.43e-13
Government expenditure	.0268667	.0351193	0.77	0.445	-.04209 .0958235

Trade openness	.0529348	.0111115	4.76	0.000	.0311173	.0747524
_cons	.4918677	.5868529	0.84	0.402	-.6604183	1.644154

The above table presents the coefficients, standard errors, t-values, p-values, and 95% confidence intervals for the variables included in the regression model. The variables analyzed are net domestic credit, government expenditure, trade openness, and a constant term represented by "\_cons."

Additionally, the fixed-effects (within) regression analysis was performed, indicating the number of groups (15) and providing the R-squared values for within, between, and overall effects. The F-test results are also displayed.

There are a total of 15 groups in the regression table above, which reflect the 15 ECOWAS member nations. The 15 nations account for 690 of the total observations. There is a positive relationship between GDP growth and the three co-efficient of net domestic credit, government spending, and trade openness, which are 4.19, 0.02, and 0.05, respectively. Furthermore, the results are relevant with p-values of 0.415, 0.445, and 0.000, all of which are less than 5%. This model believes that there are unique features of individual cross-sections that do not change over time. It also considers that these distinctive features are non-correlated with individual dependent variables of the cross-section.

It is evident from the correlation analysis that all of the chosen financial development variables in the study question have a positive connection with the growth rate of the economies of ECOWAS member nations. However, the strength of the connections varies from one variable to another. The ratio of trade volume to GDP has the strongest correlation, indicating that it has a stronger impact on this country's economic development. The relationship between net domestic credit and economic growth is the weakest (LCU). Thus, compared to the other financial development factors, its impacts are less significant.

This study's empirical research shows that none of the variables can be regarded as stable in their level form. However, following the first difference, each series enters a stationary condition. As a result, the study concludes that all sequences in the panel of

15 nations are integrated into order one and that the non-stationary null hypothesis cannot be sustained at a significance level of one percent.

The statistics inside the dimension contain estimated values of test statistics produced from estimation techniques that pooled the auto-regressive coefficients over several cross-sectional data for the root test on the estimated residuals. The statistics of the dimension incorporate these estimated values. The statistics pertaining to the dimension may contain these approximations. In between dimensions, the estimated values of statistical tests based on estimation techniques that combine independently determined parameters for each cross-section are displayed. The test statistics are contrasted with these values. These estimating techniques rely on the statistic values calculations on the interaction of the two dimensions. The tests performed both within and across dimensions suggest that the null hypothesis, which states that there is no cointegration, may be rejected in the majority of cases. In light of this, net domestic, expenditure, trade openness, and GDP growth are all cointegrated in our selected panels of ECOWAS countries for 1975–2020.

#### **4.7. Explanations of the General Results**

One key policy implication of the study's findings is that while designing energy conservation programs in ECOWAS regions, care should be made to manage the flow of commerce, investment and the development of the economy. This is because these two factors are directly related to each other and the evidence is indicated in the academic results.

Policymakers should establish an integrated trade strategy to promote trade effectively by cutting expenditures for a given economic growth, another policy consequence of the long-term fact that increased economic growth more than increases commodity consumption. International changes and domestic issues such as the availability of energy supply infrastructure and energy efficiency concerns should be taken into account. New sources of economic development and ensuring the long-term viability of commodity usage must be prioritized by the government. This research suggests that, as essential as various policies are, the circulation of money inside and outside of

economies is crucial. In essence, this demonstrates how financial knowledge is accepted in society.

We must focus on these four criteria since real money balance is reflected by many things but more the following factors in the case of Sub-Saharan Africa. For instance, political instability, price stability, fiscal deficit, and degree of financial intermediation, as studies have established in earlier research (Jao, 1976; Ogun, 1986; Fry, 1978) and our work. This study can discover elements that encourage the rise of real money balances by elaborating on the four factors mentioned below. Political stability in the sub-region, price control or stability, the elimination of budget deficits, and the lifting of different limitations on financial institutions to function freely in a free market society. As Jao (1976) points out, such a move would assist in "solicit savings by giving reasonable interest rates." As a result, ECOWAS member states must adopt a policy mix to meet these four factors if real money balances improve significantly.

Terrorist activity, bad governance, civil upheaval, youthful unemployment, mortality rate, and natural resource lease all have negative associations with economic development (Okafor, 2017). Given the recent escalation of instability in West African nations and their precarious development prospects, this research's results and policy implications could not have come at a better time.

**Table 4.5. List of Coups among ECOWAS Member States**

<b>Events</b>	<b>Date</b>	<b>Type</b>	<b>State</b>	<b>Leaders of Coup</b>	<b>Head of state</b>
2010 Nigeria coup d'état	18 February 2010	Coup	Niger	Chef d'escadron Salou Djibo	Mamadou Tandja
2010 Guinea-Bissau unrest	1 April 2010	Attempt	Guinea-Bissau	Admiral Bubo Na Tchuto Deputy Chief of Staff of the Army Antonio Ndjai	Prime Minister Carlos Gomes Júnior

2011 Nigeria coup d'état attempt	26 July 2011	Attempt	Niger	Unknown	Président Mahamadou Issoufou
--	-----------------	---------	-------	---------	---------------------------------

**Table 4.5. (cont.)**

2011 Guinea- Bissau coup d'état attempt	26 December 2011	Attempt	Guinea- Bissau	Navy Chief Natchuto Bubo	Malam Bacai Sanhá
2012 Malian coup d'état	22 March 2012	Coup	Mali	Capt. Amadou Sanogo	Amadou Toumani Touré
2012 Malian counter-coup d'état attempt	30 April – 1 May 2012	Attempt	Mali	Amadou Toumani Touré's loyalists	Acting President Dioncounda Traoré, Prime Minister Cheick Modibo Diarra, and Coup Leader and Chairman of the National Committee for the Restoration of Democracy and State of Mali, Capt. Amadou Sanogo
2012 Ivorian coup d'état attempt	13 June 2012	Attempt	Ivory Coast	Laurent Gbagboloyalists	Alassane Ouattara
2013 Benin coup d'état attempt	4 March 2013	Attempt	Benin	Col. Pamphile Zomahoun	Boni Yayi
2014 Gambian coup d'état attempt	30 December 2014	Attempt	Gambia	Lt. Col. Lamin Sanneh	Yahya Jammeh
2015 Burkinabé coup d'état	17 September 2015	Attempt	Burkina Faso	Gen. Gilbert Diendéré	Michel Kafando
2016 Burkinabé coup d'état attempt	8 October 2016	Attempt	Burkina Faso	Gaston Coulibaly	Roch Marc Christian Kaboré
2016–2017 Gambian constitutional crisis	9 December 2016– 21 January 2017	Attempt	The Gambia	Government of Gambia	Yahya Jammeh

**Table 4.5. (cont.)**

2020 Malian coup d'état	18 – 19 August 2020	Coup	Mali	Col. Assimi Goïta	Ibrahim Boubacar Keïta Prime Minister Boubou Cissé
2021 Malian coup d'état	24 May 2021	Coup	Mali	Col. Assimi Goïta	Bah Ndaw Prime Minister Moctar Ouane
2021 Guinean coup d'état	5 September 2021	Coup	Guinea	Col. Mamady Doumbouya	Alpha Condé
2022 Burkina Faso coup d'état	24 January 2022	Coup	Burkina Faso		Roch Kaboré
2022 Guinea-Bissau coup d'état attempt	1 February 2022	Attempt	Guinea Bissau		Umaro Sissoco Embaló

Military coups. (2022, February 5). Table 4.5. List of Coups among ECOWAS Member States. Retrieved from [https://en.wikipedia.org/wiki/List\\_of\\_coups\\_and\\_coup\\_attempts\\_since\\_2010](https://en.wikipedia.org/wiki/List_of_coups_and_coup_attempts_since_2010)

Price stability is a fiscal and monetary policy objective to sustain economic performance levels. The policy's goal is to keep inflation or deflation at a very low level. Commodity prices may become more volatile in 2020 due to the crisis. Relatively low preference and a pointed fall in oil prices, cumulative, are anticipated to counterbalance the increase in the price of particular products induced by supply shortages owing to constraint policies, resulting in a slight loosening of consumer price increases. The COVID-19 crisis would result in a significant increase in ECOWAS Member Nations' public deficits. After increasing by 4.7% in 2019 and 2.9% in 2018, the Economic Community of West African States (ECOWAS) deficit will reach 6.4 percent in 2020. The sharp increase in the area's budget shortfall in 2020 represents an overall rapid decline. The influence of the economic downturn and governments' quick responses to the COVID-19 crisis on the development of public loans relative to GDP would be more or less important. According to projections, the ECOWAS public debt percentage of GDP will rise to 41 percent in 2020 and 42 percent in 2021, up from 35

percent in 2019. Nevertheless, the overall state of the government debt is unconcerned. Real money balance cannot be discussed without considering the prevailing fiscal policies. The rate of inflation and deflation must be carefully controlled for ECOWAS member nations to have good fiscal policies. However, the chart below shows that the ECOWAS member countries' debt to GDP ratios are quite high. This may cause a slew of challenges and complications for overall price stability and job generation. Other additional arguments that this study did not explore are quite fascinating. That is the problem of debt entrapment, which wealthy countries are said to utilize against underdeveloped and emerging countries. That might be a future study topic, as well as related concerns.

**Table 4.6. ECOWAS Member Countries and Their Ratio to GDP**

Country	Last	Previous	Reference
<b>Benin</b>	46.1	41.4	Dec/20
<b>Burkina Faso</b>	25	22.6	Dec/20
<b>Cape Verde</b>	156	125	Dec/20
<b>The Gambia</b>	83.1	81	Dec/20
<b>Ghana</b>	78	63.9	Dec/20
<b>Guinea</b>	40	34.3	Dec/20
<b>Guinea Bissau</b>	36.5	27.4	Dec/19
<b>Ivory Coast</b>	30	31.9	Dec/19
<b>Liberia</b>	52.1	41.4	Dec/20
<b>Mali</b>	-	-	-
<b>Niger</b>	39.8	34.7	Dec/19
<b>Nigeria</b>	34.98	29.1	Dec/20
<b>Senegal</b>	47.7	47.9	Dec/19
<b>Sierra Leone</b>	71.9	71.7	Dec/20
<b>Togo</b>	29.5	20.2	Dec/19

Trading Economics. (2022, June 2). Table 4.6. ECOWAS Member Countries and Their Ratio to GDP.

Retrieved from

<https://www.imf.org/-/media/Files/Publications/CR/2022/English/1WAUEA2022001.ashx>

There are a few fundamental ways that financial development or intermediation might boost production growth on the second point. One option is to increase the amount of money invested. Most economists agree that this is the most important determinant of

considerably better development. It was recognized in works that financial intermediation entails the convergence of deficit and surplus spending units, among other things (Azege, 2004; Bencivenga & Smith, 1991; Shittu, 2012). The financial system is anticipated to deepen as a consequence of such cooperation.

To put it another way, more money will be invested in the economy via the financial sector. Recognizing the importance of investment in economic progress, ECOWAS nations must develop strategies to attract both local and international capital. Of course, investors will want to invest in ECOWAS projects when they know that movement of movement through financial intermediaries is flexible. Improving the number and structure of savings is another way financial development may influence growth. On this issue, Fry (1988) is adamant. Any government that doesn't support reserves ought to avoid making any venture, regardless of how large or little. Private savings are smaller in most ECOWAS countries due to low salary workers. Deposit interest rates in these nations are often too low to promote saving, and several banks are clearly in danger. To summarize, ECOWAS nations may accomplish financial development through intermediation by focusing government policies on preserving international competitiveness, implementing structural transformation, limiting population increase, and promoting social and fiscal growth. If the supply is limited, a nation's monetary development is likely to be shallow.

Trade liberalization, or removal of trade barriers, is at the heart of the IMF, World Bank, and WTO programs. The core concept of trade liberalization is that more commerce leads to economic growth, which leads to socio-economic development. All commerce is a good trade, and everyone benefits. However, demonstrations at the WTO's 1999 Seattle ministerial and the failure of several meetings in recent years, including the most recent in Qatar in July of this year, illustrate that this is not always the case. These approaches do not always provide the desired objectives. The Doha Development Round, which began in 2001, was named after the essential skipping issue in these negotiations for emerging nations due to mounting discontent. At the 2003 Mexico Ministerial, Lee Kyung Hae, a Korean farmer who had completed an agriculture university and received a UN award for local leadership, leaped more than a barrier near the conference and stabbed himself in the chest with a knife while holding a poster that said: "WTO Kills Farmers." The tragedy attracted attention to the

problems of small farmers throughout the world and the rising pandemic of farmer suicides; it sparked protests, and it represented yet another unsuccessful effort at talks (Patel, 2007).

Therefore, why are there so strong disagreements? However, what does trade liberalism mean in the lives of local farmers everywhere around the globe? While the IMF notes that countries' progress has been unequal in the past few decades, it points to India as a positive story because of its engagement in global commerce and adoption of freer trade (IMF, 2001). What fails to convey would be the other end of the so-called "progress," India has one of the most outstanding percentage growth rates, undernutrition is over twice that of Sub-Saharan Africa, and 350 million individuals still live in extreme poverty. According to Merrill Lynch research, India's prosperity has benefited the upper 10 percent of the society, with more than 90,000 millionaires in the country (Jafri, 2005). Because although India possesses millions of tons of excess resources to feed all its citizens, over 20,000 people were killed by famine between 2001 and 2003 (Shiva, 2003) because they were too poor to buy it, casting doubt on the role of increased commerce and economic expansion in progress.

The IMF's borrowing conditionality guidelines, as well as the WTO's Agricultural production Consensus, are a mix of economic liberalization which thus call for the removal of trade barriers like tariff barriers and quantitative restrictions, as well as state subsidies and government assistance, which typically indicates no cost controls and social welfare programs like in the instance of employment rate. Less government interference eliminates state inadequacies and allows private investments to fill the void. In contrast, the privatization of state companies and services is intended to boost efficiency and reduce government expenditure. One such is Bulgaria's very contentious attempt to privatize water (Shultz). Low-income and lower advanced economies are constantly urged to open themselves up to international trade investment opportunities and multinational companies, as well as broaden their agricultural output, which means shifting from basic survival to cash crops, leaving them increasingly reliant on foreign products of staple foods for food and survival, and vulnerable to global market volatility.

Agricultural production will always be at the core of socio-economic development, according to the 2007 World Development Indicators. Although 70% of individuals in developing nations rely on agriculture explicitly or implicitly, just 4% of government development aid goes to agriculture and food security (Stiglitz, 2006, p74). It is the primary source of income for 2.5 billion people, particularly farmers and other dependencies. It is vital to agricultural production in nations constantly subjected to disasters and little food aid (WB, 2008). Previously, governments used high customs duties to defend themselves from importation surges. However, in recent years, there seems to be an increase in food instability and artificial famines, with no lack of food shortages around the globe (Shah, 2001). Small farms and producers are forced to compete directly with huge companies by cutting tariffs. At the same time, export subsidies promote excess production and food dumping below the actual production cost, putting farmers out of business. These transfer subsidies decrease global market values and undercut competitiveness for local growers and their dependencies, increasing unemployment, and compels people to relocate to overcrowded cities and take low unskilled tasks when farming is all they know.

Moreover, lower tariffs can result in a loss of government revenue, which may account for a significant amount of a country's national income invested in education, health, infrastructure, and other projects. Even the claim that it offers lower-cost food for the poor is flawed because well-off people can benefit from lower costs, and the poor who have lost their jobs cannot buy even lower-cost items. Tariffs and quotas are frequently the only methods for impoverished countries to defend themselves against import surges and food dumping, mainly if agriculture is their primary source of income. The irony is that these policies have marginalized and squeezed the same individuals they intended to bring out of the global market for their benefit. They have just been removed.

Protectionism is sometimes accused of contributing to sluggish job creation and poverty in Poorest Nations by treating them differently in global commerce; nevertheless, many rural areas are underrepresented in world commerce by engaging more now and reopening their marketplaces. The poorest nations, who are already at a disadvantage, are frequently obliged to forego the sole protective measures versus importation booms and food dumping, which was also the case with the last Qatar

discussions in Switzerland, which failed. India and China intended to safeguard their farmers from import spikes by applying tariffs beyond a specific level under the WTO's "special safety mechanism." However, the US and EU refused, insisting on even broader access to their marketplaces while still protecting their own (Patel, 2008). Reintroducing quantitative limitations on agricultural imports is presently India's sole credible option for protecting its agriculture and the livelihoods of two-thirds of the country's population (Jafri, 2005).

When comparing the policies adopted in rich countries to those applied in developing and developed nations, the disparities between whatever they are supposed to achieve and the outcome on the surface are apparent and noteworthy. While laws call for the removal of trade-distorting export incentives, the impoverished nations, not the powerful, are frequently required to follow the rules. The United States and the European Union have the most extraordinary export subsidies, and while they have committed to removing them, this will not happen until 2012 or 2013. (Jafri, 2005). Additionally, most of these incentives go to wealthy farmers; according to Heritage Foundation research, Ted Turner and David Rockefeller are among them (Reidl, 2002). After committing to reduce agriculture subsidies during the Doha Development Round, the US nearly quadrupled them in 2002. (Stiglitz, 2006, p80).

Because when IMF claims that developing nations may gain more from agricultural liberalization because of their chance to compete in that sector, but this is far from the case. At the 2005 Hong Kong Ministerial, the United States pledged to extend its marketplace to most items from LDCs, but only to things they do not make, such as aircraft engines from Bangladesh, instead of commodities they produce (Stiglitz, p83). According to Africa Renewal, African nations such as Zambia are urged to trade technical items and things, they do not make but are constrained in what they may export (Fleshman, 2006).

According to research, Africa's poverty rate has doubled in the previous two decades (Stiglitz, p42). Africa, which was once a net food producer in the 1970s, is now highly reliant on trade importation and humanitarian relief, according to the Food and Agriculture Organization (FAO). Even in the best of circumstances, 42 African nations rely on imports. It is the only region where grain yields have remained stagnant,

causing one in every three Africans to be suffering from malnutrition." 2008 (Fleshman). Cotton is one subsidy that has received much attention. The United States gives a \$4 billion cotton subsidy that has harmed West African growers by deliberately decreasing worldwide prices. Cotton export earnings account for a significant component of the economic output in the West African countries of Mali, Burkina Faso, Chad, and Benin (Oxfam, 2002). "Cotton has become an emblem of the injustice of the global economic system," Oxfam stated in July 2008. Cotton provides a living for ten million people in West Africa alone." (Mazzei, 2008) Despite the unconstitutional consequences, the most recent Farm Bill did not include a modification of the subsidies.

However, these subsidies have not just harmed Africa. In India, there is an area known as the suicide belt, which was initially known as the cotton belt and has seen thousands of farmers commit themselves during the last decade. According to the film *The Dying Fields*, farmers commit suicide for as little as \$150 in debt. Farmers are not permitted to preserve seeds owing to genetically modified seeds under the WTO's TRIP agreement since cotton prices have been falling. Monsanto (often under different Indian brands) introduced genetically engineered seeds dubbed Bt cotton into the Indian market, promising increased yield and insect resistance. However, it is costly and requires irrigation, which most farmers lack and rely on well-behaved monsoons. As a result, when the harvest fails, they are left in debt, at risk of losing their farms, and forced to fend for themselves instead of government assistance. The land is the source of livelihood for 700 million people in India. Cotton subsidies granted to agriculture in the United States stimulate overproduction, which is then dumped on the international market, artificially depressing prices and contributing to the collapse of the Cancun negotiations in 2003. At the same time, Brazil vowed to impose sanctions on many other areas.

## **CHAPTER V**

### **CONCLUSION AND DISCUSSIONS**

This study's final chapter emphasizes the significance of this study and the reason for filling the research gap. Second, it underscores the summary of the methodological chapter and how the data was analyzed. Third, it pointed out the research results obtained.

Overall, this study has shown from the literature how financial development has long been seen as an essential element of economic expansion throughout the history of developmental economics. Furthermore, extensive evidence from scholarly literature suggests that financial literacy and awareness are required for any genuine economic advancement. Again, in the case of ECOWAS, financial development as a requirement for economic growth is essential to the union's macroeconomic prospects. However, the research gap addressed by this analysis was that none of the studies particularly assessed the degree of financial development in ECOWAS member nations from 1975 to 2020. Taking this into consideration, this master's thesis explored the role of financial development in the attempt to achieve economic advancement by the Economic Community of West African States (ECOWAS) member states. The World Bank database was utilized to acquire data for this quantitative analysis in order to answer the research questions. The four key elements covered in the figures for each ECOWAS member state were GDP growth (annual%), Net domestic credit (current Local Currency Unit), Expenses (% of GDP), and Trade (% of GDP). STATA, which is appropriate for interpreting panel data studies, was used to analyze the data in this study to test the hypothesis of interest. This study showed a significant association between ECOWAS member countries' economic growth and financial development.

From the obtained regression tables, GDP growth was the dependent variable for this study. Its welfare and positive progress were based on independent variables, namely net domestic credit, and the two control variables of government expenditure, and trade openness. For the GDP growth to be successful, financial development has to be

improved across the ECOWAS members. However, there appears to be a long-term link between trade liberalization and economic development.



## REFERENCES

- Adams, K. M., & Eschenbach, D. A. (2004). The genetic contribution towards preterm delivery. In *Seminars in Fetal and Neonatal Medicine* 9(6), 2-11. <https://doi.org/10.1016/j.siny.2004.04.001>
- Adebisi, Y. A., Umah, J. O., Olaoye, O. C., Alaran, A. J., Sina-Odunsi, A. B., & III, D. E. L.-P. (2020). Assessment of Health Budgetary Allocation and Ex penditure Toward Achieving Universal Health Coverage in Nigeria. *International Journal of Health and Life Sciences*, 6(2), 3-9. <https://doi.org/10.5812/ijhls.102552>
- Agénor, P. R., & Pereira da Silva, L. A. (2012). Macroeconomic Stability, Financial Stability, and Monetary Policy Rules. *International Finance*, 15(2), 7-11. <https://doi.org/10.1111/j.1468-2362.2012.01302.x>
- Aghevli, B. B., & Khan, M. S. (1977). Inflationary Finance and the Dynamics of Inflation: Indonesia, 1951- 72. *American Economic Review*, 67(3), 1-12.
- Akinboade, O. A., & Kinfaek, E. C. (2015). Financial development, economic growth and millennium development goals in South Africa. *International Journal of Social Economics*, 42(5), 2-7. <https://doi.org/10.1108/IJSE-01-2013-0006>
- Akinboade, O. A., Niedermeier, E. W., & Siebrits, F. K. (2002). The dynamics of inflation in South Africa: Implications for policy. *South African Journal of Economics*, 70(3), 9-14.
- Al-Awad, M., & Harb, N. (2005). Financial development and economic growth in the Middle East. *Applied Financial Economics*, 15(15), 10-11.
- Apostolides, A., Apostolides, C., & Güray, E. (2012). From Conflict to Economic Interdependence in Cyprus. *Peace Review*, 24(4), 2-12. <https://doi.org/10.1080/10402659.2012.732420>
- Ardic, O. P. and Damar, H. E. (2006). Financial sector deepening and economic growth: Evidence from Turkey. *Journal of Business Management*, 3(1), 5-7.
- Azege, M. (2013). Forward Exchange Rate Efficiency: A Cointegration and Error Correction Model Approach. *SSRN Electronic Journal*. 21-33 <https://doi.org/10.2139/ssrn.1773212>
- Bailey, M. J. (1956). The Welfare Cost of Inflationary Finance. *Journal of Political Economy*, 64(2), 10-12. <https://doi.org/10.1086/257766>
- Bakang, M. L. N. (2014). Effects of Financial Deepening on Economic Growth in Kenya. *International Journal of Business and Commerce*, 4(7), 1-13.
- Bencivenga, V. R., & Smith, B. D. (1991). Financial intermediation and endogenous growth. *Review of Economic Studies*, 58(2), 4-10. <https://doi.org/10.2307/2297964>

- Bridges, B. J., Rossiter, N., Thomas, R., Assessment, M., & Division, S. (2011). Understanding the recent weakness in broad money growth. *Bank of England Quarterly Bulletin*, 1. 5-6.
- Chandra, A., Jayaraman, T. K., & Waqabaca, F. (2004). Reforms in banking supervision in Fiji: A review of progress. *Pacific Economic Bulletin*, 19(3), 8-14.
- Chuah, H. L., Thai, V. C., & Chuah, L. (2004). Financial development and economic growth: Evidence from causality tests for the GCC countries. 3-9.
- Chukwu, J. O., & Agu, C. C. (2009). Multivariate causality between financial depth and economic growth in nigeria. *Savings and Development, SUPPL. 1-14*
- Corbett, D. C., & Rostow, W. W. (1960). The Stages of Economic Growth: A Non-Communist Manifesto. *International Journal*, 16(1), 3–10. <https://doi.org/10.2307/40198523>
- Dabla-Norris, E., Kochhar, K., Ricka, F., Suphaphiphat, N., Tsounta, E., & Tiwari, S. (2015). Causes and Consequences of Income Inequality: A Global Perspective. *Staff Discussion Notes*, 2015(013), 1-7.
- Darrat, A. F. (1999). Are financial deepening and economic growth causally related? another look at the evidence. *International Economic Journal*, 13(3), 3-12. <https://doi.org/10.1080/101687399000000002>
- Darrat, A. F. (2002). The relative efficiency of interest-free monetary system: Some empirical evidence. *Quarterly Review of Economics and Finance*, 42(4), 8-9. [https://doi.org/10.1016/S1062-9769\(01\)00119-3](https://doi.org/10.1016/S1062-9769(01)00119-3)
- de Serres, A., Kobayakawa, S., Sløk, T. M., & Vartia, L. (2011). Regulation of Financial Systems and Economic Growth. *SSRN Electronic Journal*, 7. <https://doi.org/10.2139/ssrn.965693>
- De Gregorio, J., & Guidotti, P. E. (1995). Financial development and economic growth. *World development*, 23(3), 433-448.
- di Giovanni, J. (2005). What drives capital flows? The case of cross-border M&A activity and financial deepening. *Journal of International Economics*, 65(1), 1-6. <https://doi.org/10.1016/j.jinteco.2003.11.007>
- Drambi, L. Y., Adzu, A., Samson, R., & Lugu, Charles. (2015). Financial Deepening and Economic Development of Nigeria : An Empirical Investigation ( 1981-2013 ). *European Journal of Business and Management*, 7(33), 9.
- Dreamstimes (2022), *Vector map and flag of the Economic Community of West African States ECOWAS*, [online image][20 May, 2022] <https://www.dreamstime.com/map-flag-economic-community-west-african-states-ecowas-vector-image171313616>

- Easterly, W., Rodriguez, C. A., & Schmidt-Hebbel, K. (1994). Public sector deficits and macroeconomic performance. *Public Sector Deficits and Macroeconomic Performance*, 2-9. <https://doi.org/10.2307/1061325>
- Fadeyi, O., McGreal, S., McCord, M. J., Berry, J., & Haran, M. (2022). Influence of the global environment on capital flows in the London Office market. *Journal of European Real Estate Research*, 8. <https://doi.org/10.1108/JERER-05-2021-0029>
- Fanelli, J. M., & Medhora, R. (1998). Financial Reform in Developing Countries: An Overview. In *Financial Reform in Developing Countries*, 4-7. [https://doi.org/10.1007/978-1-349-26871-9\\_1](https://doi.org/10.1007/978-1-349-26871-9_1)
- Ferreira da Silva, G. (2002). The impact of financial system development on business cycles volatility: Cross-country evidence. *Journal of Macroeconomics*, 24(2), 9. [https://doi.org/10.1016/S0164-0704\(02\)00021-6](https://doi.org/10.1016/S0164-0704(02)00021-6)
- Fishkin, J., Keniston, K., & McKinnon, C. (1973). Moral reasoning and political ideology. *Journal of Personality and Social Psychology*, 27(1), 1-2. <https://doi.org/10.1037/h0034434>
- Forson, J. A. (2020). Innovation financing and public policy dilemmas in the Economic Community of West African States (ECOWAS). *African Journal of Science, Technology, Innovation and Development*, 12(1), 4-10. <https://doi.org/10.1080/20421338.2019.1599575>
- FRY, G. K. (1988). THE THATCHER GOVERNMENT, THE FINANCIAL MANAGEMENT INITIATIVE, AND THE 'NEW CML SERVICE.' *Public Administration*, 66(1), 5-6. <https://doi.org/10.1111/j.1467-9299.1988.tb00678>
- Fry, M. J. (1978). Money and Capital or Financial Deepening in Economic Development? *Journal of Money, Credit and Banking*, 10(4), 1-11. <https://doi.org/10.2307/1991576>
- F.S. Mishkin, & K. Schmidt-Hebbel. (2001). One Decade of Inflation Targeting in the World What Do We Know and What Do We Need to Know. *NBER Working Paper Series 8397, National Bureau of Economic Research, Cambridge*, 4-10.
- Ghani, & Ejaz. (1992). How financial markets affect long run growth: a cross country study. *Policy Research Working Paper Series*, 3-11.
- Greenwood, J., & Jovanovic, B. (1990). Financial Development, Growth, and the Distribution of Income. *Journal of Political Economy*, 98(5), 1. <https://doi.org/10.1086/261720>
- Gries, A. (2010). Emergency departments in Germany- The anaesthesiological view of the present situation . *Anesthesiologie Und Intensivmedizin*, 51(6), 4-10.
- Hassan, M. K., Sanchez, B., & Yu, J. S. (2011). Financial development and economic growth: New evidence from panel data. *The Quarterly Review of economics and finance*, 51(1), 88-104.

- Honohan, P. (2009). Household Financial Assets in the Process of Development. In *Personal Wealth from a Global Perspective*, 2-8. <https://doi.org/10.1093/acprof:oso/9780199548880.003.0013>
- Hye, Q. M. A., Wizarat, S., & Lau, W. Y. (2016). The impact of trade openness on economic growth in China: An empirical analysis. *The Journal of Asian Finance, Economics and Business*, 3(3), 27-37.
- Ibrahim, A. E. A. (2015). Economic growth and cost stickiness: evidence from Egypt. *Journal of Financial Reporting and Accounting*, 13(1), 4-14. <https://doi.org/10.1108/jfra-06-2014-0052>
- Inoue, T., & Hamori, S. (2016). Financial Access and Economic Growth: Evidence from Sub-Saharan Africa. *Emerging Markets Finance and Trade*, 52(3), 4-8. <https://doi.org/10.1080/1540496X.2016.1116282>
- J. O. (1991). An econometric analysis of the nature and causes of inflation in Nigeria. *Economic and Financial Review*, 29(3), 2.
- Jao, Y. C. (1976). Trade and economic development in Taiwan. *Intereconomics*, 11(6), 7. <https://doi.org/10.1007/BF02928962>
- Jimoh, A. T., Tawakalit Shittu, A., & Attah, J. A. (2019). IMPACT OF FINANCIAL INCLUSION ON PERFORMANCE OF BANKS IN NIGERIA. *Fountain University Osogbo Journal of Management (FUOJM)*, 4(3), 9.
- Karpuz, F., Güray, E., & Kirikkaleli, D. (2021). Sustainable-performance instrument development and validation in the northern cyprus banking sector. *Sustainability (Switzerland)*, 13(14) 7. <https://doi.org/10.3390/su13147809>
- Keho, Y. (2020). Impact of Remittances on Financial Development: Revisiting the Evidence for ECOWAS Countries. *Theoretical Economics Letters*, 10(01), 10. <https://doi.org/10.4236/tel.2020.101011>
- Klein, M., & Neumann, M. J. M. (1990). Seigniorage: What is it and who gets it? *Weltwirtschaftliches Archiv*, 126(2), 8. <https://doi.org/10.1007/BF02706356>
- Kollie, G. B. (2020). Export-led growth hypothesis in ECOWAS: A panel data analysis. *African Journal of Economic Review*, 8(2), 258-275.
- Lavine, J. S., King, A. A., & Bjørnstad, O. N. (2011). Natural immune boosting in pertussis dynamics and the potential for long-term vaccine failure. *Proceedings of the National Academy of Sciences of the United States of America*, 108(17). <https://doi.org/10.1073/pnas.1014394108>
- Loayza, N. v., & Pennings, S. (2020). Macroeconomic Policy in the Time of COVID-19. In *Macroeconomic Policy in the Time of COVID-19*, 4-5. <https://doi.org/10.1596/33540>

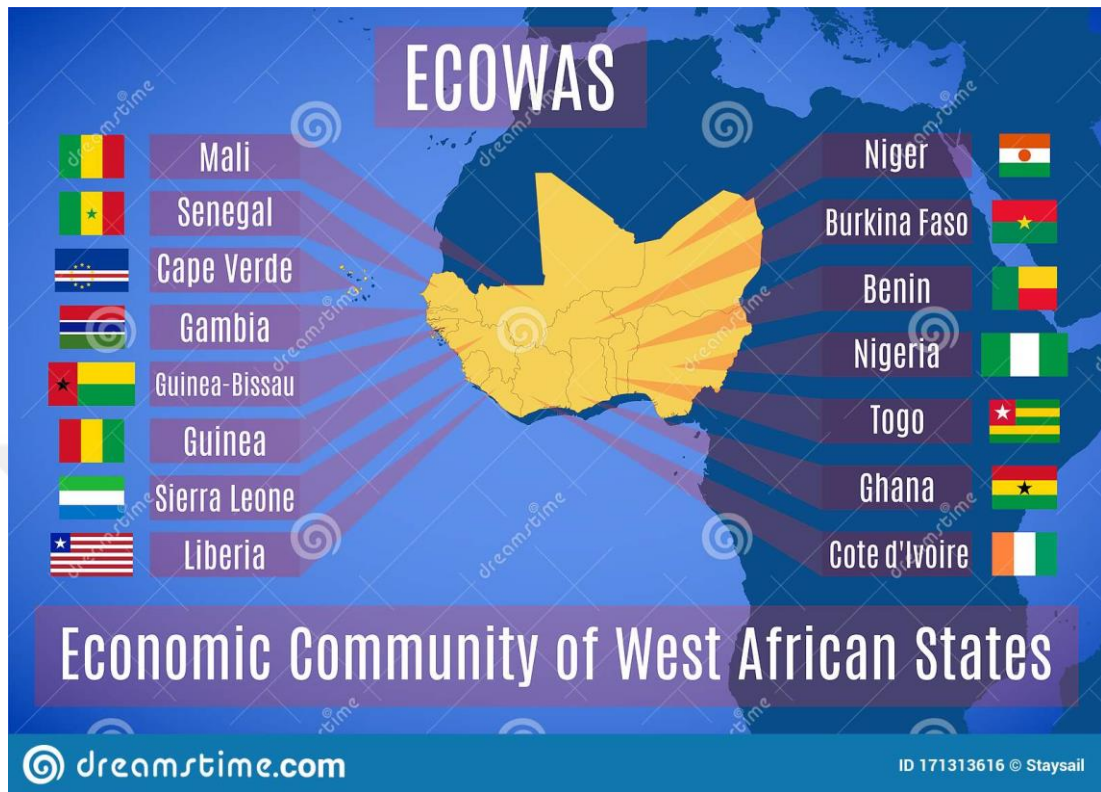
- Marc, M. saint, Goldsmith, R., & Marc, M. saint. (1970). Financial Structure and Development. *Revue Économique*, 21(3), 9. <https://doi.org/10.2307/3499896>
- Mason, E. S., Kim, M. J., Perkins, D. H., Kim, K. S., & Cole, D. C. (2020). The Economic and Social Modernization of the Republic of Korea. In *The Economic and Social Modernization of the Republic of Korea*, 9. <https://doi.org/10.1163/9781684172252>
- Mckay, A., & Aryeetey, E. (2004). “ Operationalising Pro- Poor Growth: A Country Case Study on Ghana. *Organization Development Journal*, 4-9.
- Mohammed, T. A. S., Al-Sowaidi, B., & Banda, F. (2021). Towards a technology-enhanced blended approach for teaching arabic for s ri’ purposes (Asp) in the light of the south african national qualifications framework. *International Journal of Information and Education Technology*, 11(1), 7. <https://doi.org/10.18178/ijiet.2021.11.1.1481>
- Montiel, P. J. (1996). Financial policies and economic growth: theory, evidence and country-specific experience from sub-Saharan Africa. *Journal of African Economies*, 5(3), 4.
- Mwangi, J. M., Muturi, W. M., & Ngumi, P. M. (2016). Relationship between Financial Structure and Financial Performance of Firms Listed at East Africa Securities Exchanges. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB) An Online International Research Journal*, 5(1), 3-9.
- Mwangi, L. W., Makau, M. S., & Kosimbei, G. (2014). Relationship between Capital Structure and Performance of Non- Financial Companies Listed In the Nairobi Securities Exchange, *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics (GJCRA)*, 2.
- Nyong, M. O. (1996). Capital Market Development and Long-run Economic Growth: Theory Evidence and Policy Proposal for Another Development Strategy. *Nigeria Another Development Strategy*, 129-155.
- Obafemi, F. N., Oburota, C. S., & Amoke, C. v. (2016). Financial Deepening and Domestic Investment in Nigeria. *International Journal of Economics and Finance*, 8(3), 4. <https://doi.org/10.5539/ijef.v8n3p40>
- Odeniran, S. O., & Udejaja, E. A. (2010). Financial sector development and economic growth: Empirical evidence from Nigeria. *Economic and Financial Review*, 48(3), 91-124.
- Odhiambo, N. M. (2010). Electricity consumption, labour force participation rate and economic growth in Kenya: An empirical investigation. In *Problems and Perspectives in Management* 8(1), 1-11.
- Ohwofasa, O. B., & Aiyedogbon, J. O. (2013). Financial Deepening and Economic Growth in Nigeria, 1986-2011: An Empirical Investigation. *Journal of Economics and Development Studies*, 1(1), 7.

- Oketch, M. (2019). Access, poverty and learning achievement for primary school leavers in Kenya: analysis of evidence from 47 counties. *Compare*, 49(1), 8. <https://doi.org/10.1080/03057925.2017.1365286>
- Okoli, B. E., & Nwosu, B. O. (2010). The effects of integrated instructional models on students' achievement in advanced financial accounting in Nigerian universities. *Asian Journal of Business Management*, 2(3), 73-76.
- Oloyede, B. M., Osabuohien, E. S., & Ejemeyovwi, J. O. (2021). Trade openness and economic growth in Africa's regional economic communities: empirical evidence from ECOWAS and SADC. *Heliyon*, 7(5), 9. <https://doi.org/10.1016/j.heliyon.2021.e06996>
- Pagano, M. (1993). Financial markets and growth. An overview. *European Economic Review*, 37(2-3), 8-10. [https://doi.org/10.1016/0014-2921\(93\)90051-B](https://doi.org/10.1016/0014-2921(93)90051-B)
- Patrick, H. T. (1966). Financial Development and Economic Growth in Underdeveloped Countries. *Economic Development and Cultural Change*, 14(2), 2. <https://doi.org/10.1086/450153>
- Peyrot, M., & Best, J. (1996). Images of Issues: Typifying Contemporary Social Problems. *Contemporary Sociology*, 25(3), 1-13. <https://doi.org/10.2307/2077519>
- Rateiwa, R., & Aziakpono, M. J. (2017). Non-bank financial institutions and economic growth: Evidence from Africa's three largest economies. *South African Journal of Economic and Management Sciences*, 20(1), 14. <https://doi.org/10.4102/sajems.v20i1.1545>
- Sanoh, A., Kocaman, A. S., Kocal, S., Sherpa, S., & Modi, V. (2014). The economics of clean energy resource development and grid interconnection in Africa. *Renewable Energy*, 62, 1-9. <https://doi.org/10.1016/j.renene.2013.08.017>
- Segers, M. C., & Meier, K. J. (1995). The Politics of Sin: Drugs, Alcohol, and Public Policy. *Public Productivity & Management Review*, 19(2), 1-10. <https://doi.org/10.2307/3380501>
- Sulaiman, L. A., Oke, M., & Azeez, B. A. (2012). Effect of financial liberalization on economic growth in developing countries: The Nigerian Experience. *International Journal of Economics and Management Sciences*, 1(12), 13.
- Swamy, V., Dharani, M., & Takeda, F. (2019). Investor attention and Google Search Volume Index: Evidence from an emerging market using quantile regression analysis. In *Research in International Business and Finance* (Vol. 50), 1-11. <https://doi.org/10.1016/j.ribaf.2019.04.010>
- Tanzi, V. (1978). Inflation, Real Tax Revenue, and the Case for Inflationary Finance - Theory With an Application To Argentina. *International Monetary Fund Staff Papers*, 25, 1-12.

- Thakor, A. v. (1996). Capital requirements, monetary policy, and aggregate bank lending: Theory and empirical evidence. *Journal of Finance*, 51(1), 1-13. <https://doi.org/10.1111/j.1540-6261.1996.tb05210.x>
- Toda, H. Y., & Yamamoto, T. (1995). Statistical inference in vector autoregressions with possibly integrated processes. *Journal of Econometrics*, 66(1–2), 8. [https://doi.org/10.1016/0304-4076\(94\)01616-8](https://doi.org/10.1016/0304-4076(94)01616-8)
- Udi, G., Ohwofasa, B. O., & Erakpoweri, J. (2018). Assessment of Youth Unemployment, Security and Corruption in Nigeria: 1986-2015. *International Journal of Innovative Research and Development*, 7(10), 8. <https://doi.org/10.24940/ijird/2018/v7/i10/oct18031>
- Udo, E. S., Jack, A. E., Abner, I. P., Idogen, K., & Ndubuaku, V. (2019). Finance-led growth and growth-led finance: Evidence from Nigeria economic and financial sector development. *Humanities and Social Sciences Letters*, 7(4), 4. <https://doi.org/10.18488/journal.73.2019.74.191.198>
- Udoh, B. E., Jack, A. E., Prince, A. I., Ekeowa, K. I. L., Ndubuaku, V., & Samuel, U. E. (2021). Financial Deepening and Economic Growth in Nigeria: ARDL and NARDL Techniques. *Universal Journal of Accounting and Finance*, 9(4), 6. <https://doi.org/10.13189/ujaf.2021.090413>
- Udoh, O. A. (2021). ACCOUNTING SERVICES AND THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN IKOT EKPENE METROPOLIS. *JournalNX- A Multidisciplinary Peer Reviewed Journal*, 7(9), 1-12.
- Wadud, M. Abdul. (2009). Financial development and economic growth: A cointegration and error correction modeling approach for south Asian countries. *Economics Bulletin*, 29(3), 9.
- Yang, L., & Hamori, S. (2021). Systemic risk and economic policy uncertainty: International evidence from the crude oil market. *Economic Analysis and Policy*, 69, 1-6. <https://doi.org/10.1016/j.eap.2020.12.001>

# APPENDIXES

## APPENDIX A



**Figure A.1. Map of ECOWAS Member States**

Image retrieved from Dreamstime website as of 20<sup>th</sup> May 2022

# CURRICULUM VITAE

## Personal Information:

Name - Surname: Yahya Sonko

## Education:

1. Ibn Haldun University, Turkey — MSc in Economics October 2020 – PRESENT.
2. Tampere University, Finland — MSc in Leadership for Change  
AUGUST 2020 – JULY 2022.
3. Bolu Abant Izzet Baysal University, Turkey — BSc Business  
Administration, October 2015 - July 2019.

## Experience:

Malmö University, Sweden — *Erasmus intern (Research Assistant)*, August 2019 - January 2020.

Kaiaf General Trading, Turkey — *Administrative head*, June 2018 - August 2019.

Reliances Financial Services, Gambia — *Direct Sales Agent*, March 2011 - November 2011.