

# Unit Fund Acquisition and Nigeria Economic Development Chukwu K.O\*

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### Abstract

This study investigated the effect of unit fund acquisition on Nigeria's economic development from 2010 to 2021 using secondary data from the Statistical Bulletin of the Central Bank of Nigeria and the annual report of NEXIM (Nigerian Export and Import Bank). The research work used Auto Regressive Distributed lag models (ARDL) techniques to test the effect between the independent variables (commercial bank lending, finance house lending, development lending and market capitalization) on the dependent variable (human development index). The study found that unit fund acquisition has an insignificant effect on Nigeria's economic development within the study period. As a result, the study recommends that the Central Bank of Nigeria collaborate with commercial banks to enhance credit availability to sectors facing deficits. Ensuring the stability of the Nigerian capital market should be a priority for the Federal Government through the Central Bank. Finance institutions should invest in financial education, especially in rural areas where loan accessibility is crucial. Development banks should provide financing and act as valuable resources for the long-term success of small, medium, and large enterprises. Furthermore, it's imperative for the federal government, working through development banks, to protect these smaller companies from formidable fintech and digital competitors.

Keywords: Unit fund acquisition and HDI

# 1. Introduction

Units describe the different types of parties in a financial transaction, i.e. the lenders and the borrowers. The borrower (the deficit unit) is an economic unit that spends more than it makes or has insufficient funds or capital for specific investments or projects. Deficit units can be individuals, sectors, companies, countries, or even a whole economy. Due to insufficient funds, the deficit unit is constantly forced to borrow funds from the surplus unit. The deficit unit often uses these funds to sustain it or finance projects. The opposite of the deficit unit is the excess unit (the lenders). According to [1], a surplus unit is an economic unit with income greater than or equal to expenditures on consumption throughout a period. An excess unit earns more than it spends on its basic needs and, therefore, has money left to invest or save. Surplus units can be individuals, sectors, countries, or even a whole economy. The surplus unit can benefit by investing and lending to the deficit unit. In Nigeria, household sometimes represents the deficit unit, as these households struggle financially and do not have enough disposable income. As a result, they may be unable to purchase additional consumer products, hold money in banks, or invest without government (or private) assistance. A business may be a deficit unit if it is short on cash for payment or investment. The government may be a deficit unit if there is a budget deficit.

On the other hand, a household may be a surplus unit if it saves money. A business or government may be an extra unit with excess cash. The flow of funds from the deficit to the spare sector will increase economic development. Economic development can improve a community's financial well-being and quality of life by creating and retaining jobs and supporting or growing incomes [2]. It is the sustaining community effort for the local economy and the quality of life by building the area's capacity to adapt to economic change [3]. They are institutions and markets that facilitate the transfer of money from surplus units to deficit units. Needs and the flow of funds

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allow us to have liquid access to the economic value stored in illiquid assets such as homes, farms, and equipment. Debt markets, in particular, provide access to this illiquid wealth and improve the standard of living for everyone by transferring funds from surplus units to deficit units [4].

a) Deficit units acquire finance from financial markets; for example, a household (surplus unit) invests its savings in a bank account, and another home or a business that needs money (deficit unit) takes out a consumer or business loan from the bank. So, the bank (financial institution) acts as an intermediary in facilitating money transfer from the surplus to the deficit unit. Commercial banks, for example, are the key contributors to economic growth globally [5]. They play a vital role in economic development by collecting savings from entities that have idle surplus funds and mobilizing savings to invest in industrial projects.

b) Commercial banks provide the capital needed for development to entrepreneurs starting up businesses; they give direct loans to the government, private entrepreneurs, and provide managerial advice to small-scale business people and provide payment services to their clients. Funds flow from lenders to borrowers via direct or market-based and indirect finance. In Nigeria's financial system, many institutions, such as development banks, Commercial banks, finance houses, capital markets, etc., can extend credit to the deficit unit. It would have become worrisome if all these financial system players made money available to the deficit unit. Hence, this study seeks to evaluate the effect of those financial system players' credit extensions on Nigeria's Human development index (HDI).

# 2. Literature Review

The financial environment is a system that transfers money from the surplus to the deficit sectors. That is why we will use the finance system instead of the financial environment. Trade has been central to the evolution of the financial system. Therefore, it is good to examine when trade began. Initially, man undertook all functions by himself as a generalist. There was no trade as time evolved, and the advantages of specialization were realized [6]. As a result, the barter trade system began. In this system, the buyer and the seller directly exchanged goods. It was a good start towards trade. But in no time, the disadvantages of the barter system became evident. There was an inability to strike the right exchangeability between two sets of goods.

Further, there was an incentive to work and save, as surplus could not be stored. Therefore, there was a need for a suitable

medium of exchange. While many instruments were tested and failed as a medium of exchange, notes and coins called money finally matched the characteristics of an appropriate medium of exchange and withstood the test of time. With the advent of money, two groups of people in the economy are the "surplus sector" and the "deficit sector". The former were groups who saved their surplus money, while the latter borrowed from the former to finance their deficit. Thus, the practice of direct borrowing and lending between the deficit and surplus units, respectively. But when, the following problems were encountered: meeting, amount, tenor and default risk [7].

Banking institutions perform an enviable role of being an essential source of capital for development. This emanates mainly from banking institutions' role in mobilizing various deposits and deploying some towards feasible and viable money-yielding ventures [8]. Banks play a pivotal role in a nation's economic structure by providing loans and advances, which are essential to the vitality of the business community. The size, type and level of such profitable outlets, along with other complimentary factors, contribute to improving the economic well-being of the country where banks are located. As a result, banking institutions have been an agent of economic growth and perhaps economic development [9]. Opined that loanable funds can only be made available to banks if the surplus unit makes substantial deposits that may accrue to loans and advances. This enables banks to run the day-to-day administration cost, remain in business and pay satisfactory dividends to shareholders. Thus, banks have a lending policy to establish the direction and use of funds from shareholders' deposits, control the composition and size of loans, and determine the general circumstances under which it is appropriate to make advances. The borrower (deficit unit) puts such loans and advances into productive use, increasing productivity and profits. As a result of the increased profits, these borrowers can pay back the principal and the interest on such loans and advances. At the same time, the bank will extend such repayment as loans and advances to other potential borrowers. These loans and advances are in a continuous circle. Any default of repayment will lead to a reduction in loanable funds and will also affect the economic development of that economy. Banks play a crucial role in the country's economic growth by extending loans and advances. However, such facilities are fully utilized by properly managing such loans and advances.

## **Development Banks**

A development bank is specifically established to provide longterm financing for various development projects, which help accelerate economic development in a country or region. Development banks are often shown and owned by government or non-profit organizations to finance projects that would otherwise not be able to get financing from commercial lenders. These institutions are known to play a crucial role in the rapid industrialization of an economy [10]. These banks provide medium- and long-term loans to prospective agriculture, industry, and commerce investors. Most developmental projects require long-term loans. Since commercial banks only offer short-term loans, development banks fill the gap by providing medium- and long-term capital to entrepreneurs to finance their enterprises. They also directly invest in various economic sectors, contributing to economic development. We can, therefore, say that development banks play an essential role in the economic development of a country. Development banks in Nigeria include the Bank of Agriculture, Bank of Industry, Federal Mortgage Bank of Nigeria, and The Infrastructure Bank of Nigeria.

# **Commercial Bank Lending**

Commercial bank lending is one of the ways through which the deficit unit acquires funds from commercial banks. A commercial loan is a debt-based funding arrangement between a business and a financial institution like a bank. It is typically used to fund significant capital expenditures or cover operational costs that a company may be unable to afford. Expensive upfront costs and regulatory hurdles often prevent small businesses from directly accessing bond and equity markets for financing.

[8]They stated that lending on a short-, medium- or long-term basis is one of the services that commercial banks render to their customers. In other words, banks grant loans and advances to individuals, business organizations and governments to enable them to embark on investment and development activities to aid their growth in particular or contribute towards the economic development of a country in general. Commercial loans are granted to various business entities, usually to assist with shortterm funding for operational costs or to purchase equipment to facilitate the operating process. Sometimes, the loan may be extended to help the business meet more basic functional needs, such as payroll funding or purchasing supplies used in production and manufacturing.

These loans often require that a business post collateral, usually in the form of property, plant or equipment that the bank can confiscate from the borrower in the event of default or bankruptcy. Sometimes, cash flow generated from the future account is used as collateral.

Like other loan types, an applicant's creditworthiness is a primary consideration for financial institutions when evaluating commercial loan requests. In most cases, businesses applying for a loan will be required to present documentation, generally in the form of a balance sheet, business plan, and other similar documents that prove that the company has a favourable cash flow. This assures the lender that the loan can be repaid according to its terms. If a company approves a commercial loan, it can expect to pay a rate of interest that aligns with the prime lending rate when the loan was issued [11].

# **Finance Houses**

A finance house is a company concerned with providing small loans to people. They engage in the provision of hire purchase and other instalment credit like mortgage loans. Finance companies play a complementary role to banks, filling the finance gaps and meeting the financial needs of their target customers. A finance company provides finance to customers and industrial, commercial and agriculture enterprises [12]. They are institutions that specialize in short-term non-bank financial intermediation. Finance companies also create rooms to channel funds from the lenders to the borrowers, mobilize funds from the surplus sector of the economy and channel them to the deficit sector. They mobilize funds from the investing public through borrowing and provide other facilities for project financing, equipment leasing and debt factoring. They reconcile the different needs of borrowers and lenders by transforming small-size, low-risk and highly liquid deposits (bank liabilities) into loans (bank asserts), which are more prominent, higher risk and illiquid.

The development of the money market (in which finance companies participate) smoothens the progress of financial intermediation, boosts economic lending, and improves the country's economic and social welfare. Finance companies play a crucial role in filling the gap in financial services that are not generally provided by the banking sector. The importance of finance houses can be emphasized from the structure of the financial system; in the financial system in most countries, commercial banks have emerged in a dominant role in mobilizing funds and using these resources for investment. Due to different regulations' structural limitations and rigidity, banks could not expand their operations in all expected areas and were confined to a relatively limited financial services sphere. Moreover, their efforts to meet long-term financing with shortterm resources may result in an asset-liability mismatch, which can pressure their financial assets. These drawbacks led to the emergence of non-bank financial institutions to support the industrialization and economic development of the country. Finance houses provide funds to borrowers in the form of mortgage loans and other types of instalment credits.

# **Capital Market Operations**

A capital market is a platform where buyers and sellers trade securities such as bonds and stocks. Both individuals and institutions participate in these transactions, with the market primarily focusing on long-term securities. The magnitude of a nation's capital market is directly interconnected to the size of its economy, which means that ripples in one corner can cause major waves somewhere else.

#### **Types of Capital Market**

The capital market consists of two types, i.e. Primary and Secondary

#### **Primary Market**

The primary market is the market for new shares or securities. A primary market is when a company issues new security in exchange for cash from an investor (buyer). It deals with the trade of new issues of stocks and other securities sold to investors.

#### **Secondary Market**

The secondary market involves trading existing or previously issued securities between investors. Once new securities have been sold in the primary market, an efficient manner must exist for their resale. Secondary markets give investors the means to resell or trade existing securities.

The capital market in Nigeria is comprised of a four-tiered structure

Tier 1: Securities and Exchange Commission.

Tier 2: The Nigerian Stock Exchange

Tier 3: The Central Securities Clearing System

**Tier 4:** The Depositories (Central Securities Clearing System and the Nigerian Stock Exchange).

# Human Development Index

It is the summary composite measure of a country's average achievements in three fundamental aspects of human development (health, knowledge and standard of living). The life expectancy assesses the health at birth, and the education dimension is measured by the mean of years of schooling for adults aged 25 years and more and expected years of education for children. The standard of living dimension is measured by gross national income per capita.

The HDI sets a minimum and maximum for each dimension, called "goalposts", and then shows where each country stands about these goalposts. This is expressed as a value between 0 and 1. The higher a country's human development, the higher its HDI value.

## **3.** Theoretical Framework

#### The Financial Intermediation Theory

This theory holds that banks are merely financial intermediaries not different from other non-bank financial institutions. They gather deposits from the surplus sector and lend to the deficit sector.

Gurley and Shaw (1955, 1960) argued that banks and nonfinancial institutions essentially share the function of being financial intermediaries, thus arguing there is nothing special about banks.

#### The Credit Creation Theory

The credit creation theory states that commercial banks can generate money in an economy. Additionally, banks produce deposits due to their lending activities, which create new purchasing power. In simpler terms, credit creation refers to expanding the availability of money through the advancement of loans and credit by banks and financial institutions.

#### **Empirical Review**

Enofe, Osa-Erhabor and Ehiorobo (2013) investigated an empirical study of Central Bank of Nigeria (CBN) regulatory activities, finance house activities and economic development within the period 1992-2010, using gross domestic product GDP(dependent) as a measure of economic growth, while Activities of Finance houses proxy by domestic credit and total assets, CBN activities proxy by the shareholders fund and minimum paid up capital, estimation of regression models and subsequent analysis of results using micro fit 4.1 econometric, statistical analytical tool. The findings indicate that significant relationships existed between Finance house activities and economic development, and CBN regulatory actions in finance house have no critical relationship.

Adams (2022) explored the role of commercial bank credit on Nigerian economic development. The development component is broken down into growth and human development to identify

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the implications of commercial bank-credit components from 1986 to 2021. Using the finance-growth theory, the study is an ex-post from the Central Bank of Nigeria (CBN) statistical bulletin and the World Bank Data Atlas report of various years. It is subjected to the Auto Regressive Distributed Lag (ARDL) technique and Bound test. Findings showed an enormously significant bank-credit impact on economic growth and the human development index. However, the individual variables reacted to the dependent variables differently but collectively impacted the outcome of the dependent variables significantly. [13]. Estimated the impact of commercial bank loans on Economic growth in Nigeria using selected variables like a genuine gross domestic product, credit to the private sector, interest rate, total deposits and interest rate from the Central Bank Nigeria statistical bulletin. The study adopted the framework of the Autoregressive Distributed Lag Model for analysis. The results of this study were analyzed using economic a priori, statistical, and econometric criteria. The findings, as explored in the empirical result of the aggregate model, revealed that interest rate has a positive and significant impact on Economic growth, indicating that interest rate contributed to Economic growth in Nigeria. Financial deepening has a positive and significant effect on Economic growth, implying that financial deepening contributes to Economic growth in Nigeria. Total deposit and credit to the private sector have positive and insignificant impacts on economic development, indicating that these variables do not impact economic growth in Nigeria [14]. Investigated the relationship between capital market operations and economic growth in Nigeria using secondary data from the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS) from 2000 to 2018. The study aimed to establish the relationships between economic growth (dependent variable) and independent variables (market capitalization, total value of transactions, and shares index). Both statistical and econometric tools were employed to explore these relationships. The statistical tool used in the study included descriptive statistics and the Pearson correlation matrix. In contrast, the econometric tools deployed in the study included the Ordinary Least Squares (OLS, the heteroskedasticity, and Ramsey reset tests. The study's significant findings showed that market capitalization and all shares index exerted a positive but insignificant influence on economic growth in Nigeria. At the same time, the total value of transactions exhibited a positive and significant impact on economic growth. The study, therefore, concluded that the relevant authorities in Nigeria should, as a matter of urgency and deliberate policy, transform the country's capital market as it is generally perceived as the appropriate channel through which medium to long-term capital is mobilized and on-lent to the investment sector which helps to drive the economy uniquely.

[15] examined the impact of the capital market on the Nigerian economy from 1981-2011. For this study, the Nigerian economy was viewed in terms of economic growth. At the same time, the stock market's performance is an impetus for the growth and development of the Nigerian economy. The economic growth was proxy by Gross Domestic Product (GDP). At the same time, the capital market variables considered were Market capitalization (MCAP), Total New issues (TNI), Value of Transactions (VLT), and Total Listed Equities and Government Stocks (LEGS). Johansen cointegration and Granger causality tests were applied. The result shows that the Nigerian capital market and economic growth are co-integrated. This indicates that a long-term relationship exists between the capital market and the development of the Nigerian economy. The result shows the clear relative positive impact the capital market plays the economic growth and invariably on the economy.

[16] examined the role of the capital market on economic development in Nigeria. However, the specific objectives are to ascertain the role played by the capital market in developing Nigeria's economy and to discover problem faced by the Nigerian capital market which inhibits economic growth. Most data from this work were sourced from the World Bank data group and NSE bulletin, which were analyzed using correlation Analysis. The results from this work indicate that the capital market plays a significant role in driving the Nigerian economy's growth. The Nigerian Public view the capital market as a substantial outlet for savings and investment. In conclusion, the capital market has a higher potential, which is yet to be realized in Nigeria. Therefore, the government should deregulate or liberalize the capital market so that market forces can determine stock prices.

[17] examined the role of commercial banks in sustainable economic development in Nigeria using three commercial banks with regional headquarters in Enugu. A survey approach was adopted for the study. Both primary and secondary data were utilized for the study. Simple percentages, tables, means and frequencies were employed to analyze the data, while a ztest was used to test the hypotheses at an alpha level set at 0.05. The study revealed that Nigerian banks contribute positively towards economic development and wealth creation. The study showed that commercial banks significantly and positively play better roles towards fund mobilization for economic growth. Commercial banks help in capital accumulation, mobilization of savings, availability of funds, financing industry, essential for foreign trade, optimum utilization of resources, removal of budget deficits, implementation of modern technology and provision of valuable services. All these services help to accelerate economic growth and development.

[18] investigated the impact of capital market and economic growth in Nigeria. The Nigerian capital market has witnessed a noticeable transformation over the years, evidenced by the increased participation of private and public investors on the stock exchange floor and in various general offers of quoted companies. The emerging market has also attracted and embraced the attention and interest of international investors, thus increasing capital inflow. The overall market capitalization had risen from 1,698.1 million naira in 1980 to 7030.8 billion naira in 2009, thus signifying an increase within the period. Transaction at the floor of NSE has grown to 685716.2 million naira in 2009 from a previous value of 16.6m recorded in 1970. From the result obtained, the capital market has a positive and significant impact on economic growth in Nigeria. The capital market variables captured in the model, such as market capitalization, number of deals and value of transactions, were all positive and significant in promoting economic growth in Nigeria. The government must implement policies that will make the market more efficient and re-position it for development within the Nigerian economy.

[19] examine the impact of mortgage financing on the economic growth of Nigeria. The study uses primary mortgage institution loans, insurance companies' real estate investment, and Deposit Money Bank private sector credit as independent variables. Economic growth was a proxy with authentic gross domestic product as the dependent variable. Data for the study were obtained from the Central Bank of Nigeria Statistic Bulletin (CBN) and analyzed using the Ordinary Least Square (OLS) Model. Findings indicated a long-run relationship between mortgage financing and economic growth in Nigeria. The shortrun result shows a negative and insignificant relationship between deposit money bank credit to the private sector and economic growth in Nigeria. Still, a positive and significant relationship exists between primary mortgage institutions loan, insurance companies' real estate investment and economic growth in Nigeria. However, the mortgage financing components significantly impact Nigerian economic growth.

[20] investigated evaluating the financial institutions and their roles in developing the Nigerian economy. The researcher selected two variables to explain the roles of financial institutions in the development of the economy. The analytical tool used was the simple linear regression involving the ordinary least square [OLS]. Data for the period of [2001-2011] was used. From the result of the regression, we found out that

there is a significant relationship between the roles of financial institutions [credit to the private sector] and the development of the Nigeria economy because about 65% variation in Gross Domestic Product [Y] was explained by the total bank loans to the private sector [X]. In comparison, about 35% of the variation was unexplained due to some internal and external factors listed in the work.

[21] examined the impact of bank lending on economic growth in Nigeria. In addition, this study aims to investigate the effect of bank lending on economic growth in Nigeria from 1987 to 2012. Using a multiple regression model, this research, based solely on secondary data, determined that bank lending accounts for approximately 82.6% of Nigeria's economic growth variation during the period. The study concludes that bank lending has a statistically significant impact on economic growth in Nigeria. This suggests that the Nigerian economy's performance is greatly influenced by bank lending [22].

# 4. METHODOLOGY

Secondary data from the annual report of NEXIM (Nigerian Export and Import Bank) and from the CBN Statistical Bulletin 2010 to 2021 were used in the study. The study revised the model from [21]. Their model is expressed as RGDP= f(X1, X2), representing a linear regression model

Where: Y = economic growth as measured by real GDP growth b0 = base constant b1-b2 = regression coefficient= aggregate bank lending x1 = size of financial intermediaries (proxy by total deposit x2 money banks' assert Ut= error The model for this research work is HDI=f (vDBL, vCBL, VFCH, MCAP)..... eq2 The following in its econometric forms:  $HDIit = \alpha 0 + \beta 1vDBLit + \beta 2vCBLit + \beta 3vFCHit + \beta 4MCAPit$ +µit..... eq 3 Where,  $\alpha = \text{constant}$  $\beta$ 1-4 = coefficient of the independent variable HDI= Human Development Index VDBL = Value of development bank lending proxy NEXIM VCBL = Value of commercial bank lending VFCH -= Value of finance house lending MKC = Market capitalization  $\mu = \text{error term}$ 

i = the firm in question

t = the time in question

# 5. RESULTS AND DISCUSSION

The descriptive characteristics of the variables are presented in (Tables 1, 2). The mean Values of the HDI, CBL, FCH, NEXIM and MKC are 0.526583, 12804.81, 60.76500, 36517897and 21141.95while their median are 0.530000, 12940.41, 47.74500, 3916004 and 18040.41 respectively. The series depicts the maximum values of 0.540000, 21643.52, 166.9800, 85706366 and 42054.50 for HDI, CBL, FCH, NEXIM and MKC, respectively. The minimum values are 0.500000 for HDI, 6685.850 for CBL, 23.77000 for FCH, 7637308 for NEXIM and 9918.210 for MKC. Commercial bank lending, finance house lending, development lending and market capitalization rates are positively skewed towards normality, as evidenced by the positive sign of the skewness. In contrast, the human development index is negatively skewed. Jarque-Bera suggests that most variables are not normally distributed as the p-values

are insignificant at a 5% significance level except inflation rate. The attainment of stationarity by variable(s) is necessary in model estimation due to the influence of non-stationarity on regression output. To this effect, the Augmented Dickey-Fuller (ADF) unit root test was used to prove the data were stationary. The Augmented Dickey-Fuller (ADF) unit root text in tables 2, 3, and 4 indicates that none of the variables were static at level, implying that the variables should be differentiated further. Only HDI and NEXIM were stationary at the first difference, according to (Tables 3, 4) which shows that all the variables were static at the second difference except NEXIM. This is because their ADF test statistic value is greater than the Mackinnon critical value of 5% in absolute terms. As a result, Auto Regressive Distributed lag models (ARDL) as a method of data analysis was required. With the determination of ARDL as a method of data analysis, concise run relationship, there is a need to determine the long run relationship using ARDL Co-Integration Relationship.

Table 1: Descriptive statistics result	s
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	HDI	vCBL	vFCH	NEXIM	MKC
Mean	0.526583	12804.81	60.76500	36517897	21141.95
Median	0.530000	12940.41	47.74500	39160004	18040.41
Maximum	0.540000	21643.52	166.9800	85706366	42054.50
Minimum	0.500000	6685.850	23.77000	7637308.	9918.210
Std. Dev.	0.013621	4588.535	41.32003	22575160	10060.30
Skewness	-0.709077	0.282835	1.657968	0.675717	1.056905
Kurtosis	2.229961	2.307843	4.723458	2.974405	3.070244
Jarque-Bera	1.302060	0.399532	6.982872	0.913515	2.236564
Probability	0.521508	0.818922	0.030457	0.633334	0.326841
Sum	6.319000	153657.7	729.1800	4.38E+08	253703.4
Sum Sq. Dev.	0.002041	2.32E+08	18780.79	5.61E+15	1.11E+09
Observations	12	12	12	12	12

Source: Computer analysis using E-views 12.0

Table 2: Result of ADF Unit Root Test at Level

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Variables	ADF Test Statistic	Test Critical Value	Test Critical	Remark
		at 1%	Value at 5%	
HDI	-2.274022(0.1949)	-4.200056	-3.175352	Not Stationary
vCBL	0.761277(0.9871)	-4.200056	-3.175352	Not Stationary
vFCH	3.393085(1.0000)	-4.200056	-3.175352	Not Stationary
NEXIM	-0.89410(0.3066)	-2.792154	-1.602074	Not Stationary
MKC	0.841708(0.9892)	-4.200056	-3.175352	Not Stationary

Source: Author's Computation

Table 3: Result of ADF Unit Root Test at 1st Diff						
Variables	ADF Test Statistic	Test Critical	Test Critical	Remark		
		Value at 1%	Value at 5%			
HDI	-3.296481(0.0441) **	-4.297073	-3.212696	Stationary		
vCBL	-2.554125 (0.1326)	-4.297073	-3.212696	Not Stationary		
vFCH	-0.398620 (0.8743)	-4.297073	-3.212696	Not Stationary		
NEXIM	-2.463722(0.0198) **	-2.816740	-1.982344	Stationary		
MKC	-2.596788(0.1248)	-4.297073	-3.212696	Not Stationary		

Source: Author's Computation

Table 4: Result of ADF Unit Root Test at 2nd Diff						
Variables	ADF Test Statistic	Test Critical Value	Test Critical	Remark		
		at 1%	Value at 5%			
HDI	-4.472663(0.0001) **	-4.420595	-3.259808	Stationary		
vCBL	-4.318065 (0.0115) **	-4.420595	-3.259808	Stationary		
vFCH	-4.075616 (0.0160) **	-4.420595	-3.259808	Stationary		
NEXIM	-0.922635 (0.2902)	-2.847250	-1.600140	Not Stationary		
MKC	-4.023579(0.0172) **	-4.420595	-3.259808	Stationary		

Source: Author's Computation

### **ARDL Co-integration Relationship**

Confirming the stationarity of the data through the unit root test of ADF and P.P. allows for determining the co-integration relationship between the dependent and explanatory variables in the models. The ARDL was chosen against the traditional Johansen co-integration because it is structured to consider the different orders of financial time series data integration.

#### **Co-integration test For Long-run Effect**

Pesaran and Shin (2001) showed that co-integrating systems can be estimated as ARDL models; it has the advantage of assessing co-integrating relationships on variables that are either I(0) or I(1). According to Pesaran et al. (2001), the asymptotic distribution of the F-statistic is non-standard regardless of whether the regressors are I(0) or I(1) and provides two adjusted critical values that establish lower and upper bounds of significance. The bound test follows the essential criterion at the lower bound and upper determined value for decision at the three significance levels: 1%, 5% and 10%.

# **ARDL Co-Integration Test**

Confirming the stationarity of the data through the unit root test of ADF allows for determining the co-integration relationship between the dependent and explanatory variables in the models. The ARDL was chosen against the traditional Johansen cointegration because it is structured to consider the different orders of financial time series data integration. The bound test follows the critical criterion at the lower and upper bound value for decision at the three significance levels: 1%, 2.5%, 5%, and 10%. Given a computed F statistics Value of 370.2087, which is greater than the lower and upper critical bound values at 2.5%, 5% and 10%, respectively, thus indicating the existence of a steady-state long-run relationship among the variables. This suggests that the various selected variables have a longrun relationship with foreign direct, given a computed F statistics Value of 370.2087, which is greater than the lower and upper critical bound values at 1%, 2.5%, 5% and 10%, respectively, thus indicating the existence of a steady-state long-run relationship among the variables. This suggests that the various selected variables have a long-run relationship with the profitability of deposit money banks in Nigeria.

**Decision rule:** We reject the null hypothesis of the cointegration relationship to accept the alternative that there is Cointegration. Thus, we conclude that unit fund acquisition, represented by Commercial bank lending, finance house lending, development lending and market capitalization, has a long-run effect on Nigeria's economic development within the study period.

# Nature of Long Run Relationship/ARDL Error Correction Model

The ARDL result has proven that the Human development index, commercial bank lending, finance house lending, development lending and market capitalization are cointegrated/related in the long run. Consequently, determining the nature of the long-run relationship and the speed of the adjustment to equilibrium becomes necessary. The ARDL result has proven that the human development index, commercial bank lending, finance house lending, development lending, and market capitalization rate are co-integrated/related in the long run. Consequently, determining the nature of the long-run relationship and the speed of the adjustment to equilibrium becomes necessary. The result in (Tables 5, 6) shows that vCBL has a positive and insignificant relationship with HDI, vFCH has a negative and negligible effect on HDI, and NEXIM has a positive and little impact on HDI.

In contrast, vMKC has a positive and insignificant effect on HDI. Regarding the speed of adjustment, (Table 6) reveals that the model moves toward equilibrium following disequilibrium in the explanatory variables. The ECM is negatively signed with a coefficient of -0.821150, suggesting that -82.1150% of error generated in the previous period is corrected in the current period and is statically significant.

	Table 5: ARDL bounds test for co-integration					
F-Bounds Test	Null Hypothesis: No levels relationship					
Test Statistic	Value	Signif.	I(0)	I(1)		
F-statistic	370.2087	10%	2.2	3.09		
k	4	5%	2.56	3.49		
		2.5%	2.88	3.87		
		1%	3.29	4.37		
	<b>a b</b>	1 1 0 1 1 2				

Source: Author's Calculation employing E-Views 12 Software

Co-integrating Form						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
D(VCBL)	5.21E-08	3.18E-08	1.638291	0.3489		
D(VFCH)	-3.46E-05	4.25E-06 -	8.141403	0.0778		
D(NEXIM)	1.99E-10	2.46E-12	80.96356	0.0079		
D(VMKC)	-5.95E-07	1.48E-08 -	40.28115	0.0158		
CointEq(-1)	-0.821150	0.007113 -	115.4449	0.0055		
	Long Run C	Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
vCBL	1.47E-06	2.97E-07	4.962895	0.1266		
vFCH	-0.000276	2.66E-05	-10.35223	0.0613		
NEXIM	8.70E-11	7.22E-11	1.204886	0.4410		
vMKC	1.78E-06	1.60E-07	11.13092	0.0570		
С	0.491035	0.001873	262.2090	0.0024		

Computer Output Data using E-views 12.0

## **Diagnostic Test**

Test for heteroskedasticity in line with the classical linear regression assumption; the model was subjected to diagnostic analysis of heteroskedasticity test. The p-values of 0.3187 for the heteroskedasticity test are insignificant at a 5% significance

level. This implies the model has no heteroskedasticity test problem (Table 7).

#### **Normality Test**

The normality test used the Jarque-Bera Normality test, which requires a series to be normally distributed; the histogram should be bell-shaped, and the Jarque-Bera statistics should not be significant. This implies that the p-value given at the bottom of the normality test table should be more effective than the chosen significance level to accept the Null hypothesis that the series is normally distributed (Brooks, 2014).



**Fig. 1:** Normality Text. Source: E-views 12.0 version data output

### Short Run OLS Relationship

In analyzing the short-run nexus between unit fund acquisition and economic development, the OLS regression was applied, and the result is shown in (Table 8). The outputs were interpreted using the coefficients of the individual variables, Adjusted R-square,f-statistic and Durbin Watson.

(Table 9) shows that vCBL and NEXIM have positive and insignificant effects on the human development index in Nigeria, while vFCH and vMKC have adverse and negligible impacts on HDI. The constant parameter for the model is nominal but positively related to HDI. It has a positive coefficient of 0.403213, which implies that if all explanatory variables are held constant in the short run, the human development index will increase by 0.403213.

Meanwhile, the coefficient of multiple determinants (R2) showed a coefficient of  $0.999898 \approx 0.99$ , which implies a 99% explanation of the behaviour of the Human Development Index by the totality of the explanatory variables: commercial bank lending, finance house lending, development lending and

market capitalization) on the short run. The Adjusted R2 further prove this with the adjusted value of 0.998984  $\approx$  0.99, which implies that 99 % explanation of the behaviour of the human development index by the totality of the explanatory variables with the remaining 1 % behaviour attributed to other variables outside the model otherwise referred to as the stochastic variables. The F-statistic indicates that the model is well fit for the estimation because the F-stat for the model is 1094.001 is greater than the F-critical value of 4.12 at a 95 percent significance level.

### **Granger Causality Test**

(Table 9) The Granger Causality test disclosed a unidirectional/one-way causal relationship between unit fund acquisition and economic development at a 5% significance level. Causality runs from the human development index to development bank financing (NEXIM). This shows that unit fund acquisition if appropriately channelled into the economy, can aid the development of Nigeria's economy.

Table	7:	Test	for	heterosked	lasticity	test
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	F-statistics	Probability	
Heteroskedasticity Test	5.554447	0.3187	

Source: Author's Calculation employing E-Views 12 Software

Dependent Variable: H	DI	1		1
Method: ARDL				
Dynamic regressors (1	lag, automatic): V	/CBL VFCH NEXI	M VMKC	
Fixed regressors: C				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
HDI(-1)	0.178850	0.039012	4.584442	0.1367
VCBL	5.21E-08	2.21E-07	0.236074	0.8524
VCBL(-1)	1.16E-06	1.24E-07	9.344139	0.0679
VFCH	-3.46E-05	2.06E-05	-1.683738	0.3412
VFCH(-1)	-0.000192	2.33E-05	-8.221881	0.0771
NEXIM	1.99E-10	1.20E-11	16.65987	0.0382
NEXIM(-1)	-1.28E-10	5.56E-11	-2.304207	0.2607
VMKC	-5.95E-07	5.69E-08	-10.45140	0.0607
VMKC(-1)	2.06E-06	8.61E-08	23.88170	0.0266
С	0.403213	0.018965	21.26059	0.0299
R-squared	0.999898	Mean dependent	var	0.529000
Adjusted R-squared	0.998984	S.D. dependent va	ar	0.011269
S.E. of regression	0.000359	Akaike info criter	rion	-13.60550
Sum squared resid	1.29E-07	Schwarz criterion	l	-13.24378
Log likelihood	84.83024	Hannan-Quinn cr	iter.	-13.83351
F-statistic	1094.001	Durbin-Watson st	tat	2.506542
Prob(F-statistic)	0.023459			

Table 8: OLS Regression: Human development index and Unit fund acquisition

Computer Output Data using E-views 12.0

Table 9: Granger Causality Output for Human development index and Unit fund acquisition

Null Hypothesis:	Obs	F-Statistic	Prob.	Implication
VCBL does not Granger Cause HDI	10	0.16086	0.8556	No Causality
HDI does not Granger Cause VCBL		0.28555	0.7631	No Causality
VFCH does not Granger Cause HDI	10	1.46326	0.3160	No Causality
HDI does not Granger Cause VFCH		0.33682	0.7291	No Causality
VMKC does not Granger Cause HDI	10	2.25200	0.2008	No Causality
HDI does not Granger Cause VMKC		0.25413	0.7850	No Causality
NEXIM does not Granger Cause HDI	10	0.03772	0.9633	No Causality
HDI does not Granger Cause NEXIM		25.4289	0.0024	Causality

Source: Computer output data using E-views 12

# 6. Conclusion and Policy Implication

Many financial institutions in Nigeria's financial system can lend to the deficit unit, including development banks, commercial banks, finance houses, the capital market, etc. If all these players in the financial system gave the deficit unit access to money, it would result in the nation's development; therefore, unit fund acquisition is to acquire funds or capital for a specific investment. As such, this paper aimed to investigate unit fund acquisition (commercial bank lending, finance house lending, development lending and market capitalization) on Nigerian economic development (HDI) between 2010 and 2021. The Augmented Dickey-Fuller unit root test was used to examine the series' unit root properties, and the results show that all variables were stationary at the first and second differences. This resulted in the use of Auto Regressive Distributed lag models (ARDL) as the method of data analysis. The analysis revealed that unit fund acquisition had an insignificant effect on Nigeria's economic development during the study period.

Consequently, the study suggests that Because of its strategic significance to Nigerian economic development, the federal government should boost commercial banks through the Central Bank of Nigeria to improve the deficit sector's credit flow. By launching initiatives that would enhance the expansion, functionality, and calibre of these financial actors in Nigeria, the Federal Government, through the Central Bank of Nigeria, should ensure the financial stability of the Nigerian capital market. Finance companies should support financial education to raise public knowledge of their services, particularly among people who live in rural areas and need loans. Development banks should collaborate with small, medium, and large firms in a way that makes them more than just a source of financing for them but also a valuable resource for long-term success. Additionally, it is crucial that the federal government, through development banks, defend these tiny companies from formidable fintech and digital rivals like Amazon and Nvidia.

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