Available online at www.koozakar.com/journal/jbietm

JOURNAL OF BUSINESS INNOVATION, ENTREPRENEURSHIP, & TECHNOLOGY MANAGEMENT

Impact Analysis of Financial Development on Employment in Nigeria

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Article Information

https://doi.org/10.69798/95399832

Published by: Koozakar LLC. Norcross GA 30071, United States.

Edited by:
Mirabel Omoruyi, PhD
Michael Olomu, PhD

Abstract

This research examines how financial development affects employment in Nigeria, examining how financial systems contribute to or hinder the growth of employment over the past decades, Nigeria's economic landscape has been influenced by various financial reforms and policy changes aimed at fostering growth. Nonetheless, the connection between financial development and employment remains complex and multifaceted. Utilizing a Vector Error Correction Model (VECM), this research assesses key financial indicators, including financial accessibility, financial stability, and financial depth, to understand their roles in the industrial sector's expansion. Data spanning from 1990 to 2023 is analyzed to identify both long-term and short-term dynamics between the financial system and employment rate. The findings highlight significant relationships, revealing that while financial accessibility and efficiency facilitate employment growth, issues such as financial instability and inefficient allocation of resources can impede progress. The study underscores the importance of targeted financial policies that bolster employment, recommending improvements in financial infrastructure, regulatory frameworks, and credit allocation mechanisms. These insights contribute to policy formulation and strategic planning aimed at enhancing the symbiotic relationship between Nigeria's financial sector and its employment trajectory.

Keywords: Impact, Financial development, Employment, Nigeria, Vector error correction model

INTRODUCTION

The creation of jobs has been a significant obstacle that threatens the economic well-being of the populace in the majority of African nations, including Nigeria. (Bello & Fagbemi, 2023). The structure of the Nigerian economy reflects the characteristics of an underdeveloped country. Since gaining independence in 1960, Nigeria's employment history has undergone significant transformations, influenced by shifts in economic priorities, political developments, and demographic trends (Erumebor, 2025). Initially, the economy was predominantly agrarian, with the majority of the population engaged in farming, forestry, and fishing (Erumebor, 2025). Agriculture was the backbone of the economy, providing employment for rural communities and generating foreign exchange through exports of cash crops such as cocoa, groundnuts, cotton, and palm oil (Kumar, 2024). This period saw relative stability in employment, as the agricultural sector absorbed a significant portion of the labor force. The discovery and exploitation of crude oil in the late 1960s and the subsequent oil boom of the 1970s marked a turning point (Mcnally, 2017). Oil revenues surged, and the economy shifted focus from agriculture to the oil sector (Oguntoye & Oguntoye, 2021). As a result of this shift, agricultural productivity decreased and employment as workers left rural areas for perceived better opportunities in urban centers and the oil industry. The neglect of agriculture and overreliance on oil revenue created a structural imbalance in the economy, laying the foundation for future employment challenges (AbdulRazaq & Lambe, 2024).

The 1980s brought economic hardship following a global oil price collapse, which severely impacted Nigeria's economy. Under the direction of the World Bank and the International Monetary Fund (IMF), the nation implemented Structural Adjustment Programs (SAPs). (Nelson, 2025). While these programs aimed to liberalize the economy, they resulted in public-sector job cuts, reduced government spending, and the closure of uncompetitive industries. This period saw a sharp rise in unemployment and underemployment, especially among the youth, as formal employment opportunities dwindled. During the 1990s, political instability and economic mismanagement further exacerbated the unemployment crisis. Corruption, lack of industrial development, and policy inconsistency hindered job creation (AbdulRazaq & Lambe, 2024). The manufacturing sector, which had the potential to absorb the growing labor force, remained underdeveloped (Erumebor, 2025). Educational institutions produced graduates faster than the economy could provide jobs, leading to a mismatch between skills and labor market demands (Okoli, 2020).

The return to democracy in 1999 brought renewed hope for economic recovery (Odugbo & Udalla, 2022). Reforms such as privatization and infrastructure investment were implemented to stimulate growth. While the 2000s experienced periods of economic expansion, the growth was not inclusive enough to significantly reduce unemployment. Youth unemployment remained a pressing issue, as the education system continued to produce a workforce ill-suited for the available job opportunities (Akaeze, 2024). In the 2010s, the government launched policies like Vision 20:2020 and the The Economic Recovery and Growth Plan (ERGP) sought to diversify the economy and lessen dependency on oil by promoting industries including manufacturing, technology, and agriculture. (Ndiomaluke *et al.*, 2025). Additionally, the global oil price crash in 2014 caused further job losses, particularly in the oil and gas sector (Ikechi & Anthony 2020). The 2020s have been marked by unprecedented challenges, including the economic fallout from the COVID-19 pandemic. The informal sector, which employs a significant portion of Nigeria's workforce, was severely disrupted, leading to further unemployment (Onwo & Oazulike, 2021). Youth unemployment has reached record levels, reflecting the ongoing struggle to create sustainable jobs (Adeosun *et al.*, 2022).

In a stark contrast, achieving full employment is a central macroeconomic objective for government's worldwide (Goodwin *et al.*, 2022). However, this goal often proves challenging, especially in developing nations. One major obstacle lies in the inherent conflict between competing macroeconomic objectives. For example, economic theory highlights a short-run trade-off between inflation and unemployment, as outlined by Carnevalli & Deneidi (2023). Consequently, a nation striving for full employment must accept a

degree of elevated inflation, and vice versa. Additionally, structural deficiencies within a country's economic framework or external shocks from the global economy can hinder progress toward full employment (Khan *et al.*, 2020). Despite notable economic growth reported in many developing and developed nations, the challenge of creating sufficient and sustainable jobs for citizens persists (Hariram *et al.*, 2023).

The motivation of this study focuses on analyzing the impact of improving quality, efficiency and accessibility of financial services on employment in Nigeria, specifically over the period from 1990 to 2023. This 33-year timeframe is carefully chosen based on the availability and reliability of time series data for both the policy variable—financial development and the target variable employment levels. Ultimately, this research serves as a roadmap for achieving a more inclusive and resilient economy driven by a well-functioning financial system and a vibrant labor market with well-structured theoretical linkages between the two key variables being examined

LITERATURE REVIEW

Concept of Employment

Many economists and institutions continue to see it as a prerequisite for accelerating growth rates and improving people's livelihoods. Employment refers to the state in which an individual engages in work for remuneration or wages, typically under a contract or agreement, either full-time or part-time. Employment is seen as the number of people working, either in the formal or informal sector, and includes all types of work arrangements such as wage employment, self-employment, and family work, both for remuneration and non-remuneration purposes (Avgeri, 2024). Employment includes any form of work that is remunerated, whether full-time or part-time, and whether in the formal or informal economy. It is measured by the number of individuals who actively engage in economic activities for a specified period (Ervin *et al.*, 2025).

Everyone who works for compensation, profit, or family gain is considered employed. It include those involved in any type of economic activity, including wage job, self-employment, and unpaid family labour. (Eke, 2021). Employment represents the formal or informal engagement of workers in paid work, where individuals exchange their labor for monetary compensation or in-kind rewards. It can be seen as both a source of livelihood and a means of economic participation (Baker & Grose, 2018).

Concept of Financial Development

The process of increasing the scale, effectiveness, stability, and accessibility of financial markets and institutions is known as "financial system development". Such development yields numerous economic benefits. A robust financial market efficiently channels the economy's savings into productive and profitable investments, ensuring better resource allocation (Challoumis, 2024). Improved financial systems reduce information asymmetry, which helps allocate capital more effectively (Ahmed *et al.*, 2023). Furthermore, developed financial intermediaries play a critical role in fostering technological innovation by incentivizing entrepreneurial ventures (Malaiya, 2025). Levine (2024) underscores the multifaceted role of financial systems in trading, diversification, hedging, and risk mitigation. These systems also facilitate the seamless transactions of goods and services, which are vital for economic stability. Levine highlights that financial systems drive economic growth by enhancing capital accumulation and fostering technological innovation. Through the strategic allocation of credit, financial systems link the financial and real sectors. For instance, credit used for working capital boosts immediate production, while investments in fixed capital enhance long-term productivity (Nicholas, 2022). A well-developed financial system ensures efficient capital allocation, reduces transaction costs, and stimulates innovation, all of which are essential for sustainable economic growth. Financial development is characterized by several improvements, such as expanded access to financial intermediation, broader diversification of investment options, higher-quality information flows, incentives for prudent lending and monitoring, and advanced risk management practices.

The Dynamics of Financial Development: Costs, Innovations, and Modernization

Financial development fundamentally aims to minimize both explicit and implicit costs inherent in the functioning of financial systems and the delivery of financial services. The manifestations of financial development, however, vary across

contexts, influenced by the unique economic, social, and temporal factors of different regions and periods. Historically, the evolution of financial systems has often been marked by a transition from financial repression—characterized by restrictive policies limiting financial market functions—to financial liberalization, which opens markets to increased competition and efficiency. Yet, the outcomes of financial liberalization remain ambiguous, sometimes resulting in unintended economic volatility and inequality.

A growing concern in modern economies is financialization, where the growth of financial sector liabilities outpaces the overall economic growth. This phenomenon can diminish the incentives for genuine financial development by misallocating resources towards speculative activities rather than productive investments. Despite these challenges, financial innovation emerges as a key driver in mitigating the adverse effects of financialization. These digital advancements are bridging gaps in financial inclusion, strengthening the connection between economic expansion and financial development, and resolving structural weaknesses within the sector. Digital-driven financial development promises to enhance accessibility, efficiency, and overall functionality of financial systems. By fostering greater transparency, reducing transaction costs, and democratizing financial services, digitalization is positioning the financial sector as a catalyst for sustainable economic development. This modernization not only rectifies past imbalances but also lays a robust foundation for a resilient and inclusive global economy.

Theoretical Review

The Capital Accumulation and Investment Theory underscores the critical financial development's function in promoting economic expansion and employment through efficient resource mobilization and allocation. Financial systems act as intermediaries, channeling household savings into productive investments across various sectors. By facilitating credit access, especially for businesses, financial institutions empower firms to expand operations, adopt new technologies, and invest in ventures that generate both direct and indirect employment opportunities. Central to the theory is investment in fixed capital such as infrastructure, machinery, and equipment which creates immediate jobs in sectors like construction and manufacturing while enhancing long-term industrial productivity, ensuring sustained employment growth. Financial liberalization reducing restrictions on financial markets boosts savings and investment, accelerating economic activity and job creation (Saada, 2025). Conversely, financial repression hinders savings and resource allocation, slowing economic progress and employment. In the context of developing economies like Nigeria, this theory highlights the importance of a robust financial system to tackle unemployment. Enhancing credit access for SMEs, supporting infrastructure development, and fostering innovation are critical pathways through which financial development can drive job creation. The theory advocates for sound financial policies and institutions to unlock the potential of financial development, enabling sustainable employment and broader economic transformation.

Similarly, the Entrepreneurship and Innovation Theory**.** This theory highlights the critical role of financial development in fostering entrepreneurship, driving innovation, and creating employment opportunities. According to this theory, a well-functioning financial system provides the necessary resources such as credit, venture capital, and other forms of funding for entrepreneurs to establish and expand their businesses. By lowering financial constraints, financial institutions enable individuals to take risks, innovate, and create new products, services, and industries, all of which contribute to job creation and economic growth. Entrepreneurship serves as a key driver of employment, especially in underdeveloped nations where SMEs (small and medium-sized businesses) are the backbone of the labor market. Access to financial services allows entrepreneurs to start businesses, hire workers, and contribute to economic diversification. Furthermore, innovation fueled by financial development leads to the creation of new sectors and markets, offering additional employment opportunities and fostering economic resilience. Financial intermediaries play a vital role in rewarding entrepreneurial activities by reducing the costs of capital and mitigating risks (Saleem *et al.*, 2024). They suggest that financial systems not only provide funding but also enhance the allocation of resources to the most productive ventures,

stimulating technological progress and job creation. In addition, this theory emphasizes that financial development supports innovation through the provision of venture capital and funding for research and development (R&D) initiatives. Innovative activities often lead to the establishment of high-growth industries, which generate significant employment opportunities and improve overall labor market dynamics. For countries like Nigeria, the Entrepreneurship and Innovation Theory underscores the need for financial systems that cater to startups and SMEs, as these entities are crucial for addressing unemployment. Policies that promote financial inclusion, reduce borrowing costs, and encourage private-sector innovation are essential for unlocking the entrepreneurial potential of the population. By doing so, financial development can act as a catalyst for employment generation, economic diversification, and long-term growth.

Empirical Reviews

Using the Autoregressive Distributed Lag (ARDL) technique, Fasheyitan *et al*. (2022) investigated the relationship between financial development and employment creation in Nigeria from 1990 to 2019. The purpose of the study was to investigate how financial variables including market capitalisation, money supply, and private sector lending are related to the creation of jobs. The results showed that market capitalisation and the money supply to GDP ratio, which are indicators of financial growth, significantly and favourably affect the creation of jobs in Nigeria. These findings imply that by boosting economic activity and investment, financial market expansion and efficiency as well as a sufficient money supply are essential for promoting job creation.

Using yearly data from 1981 to 2014, Ndubisi (2017) investigated the connection between financial development and job creation in Nigeria. The study used co-integration analysis to check for the existence of long-term equilibrium correlations and a multivariate Vector Auto-Regressive (VAR) framework to investigate the long-term relationships between financial development and employment creation. The ratio of liquid liabilities to GDP, the ratio of private sector credit to GDP, and deposit money bank assets as a proportion of GDP were among the financial variables taken into account in the study. The findings suggested a long-term link between financial development and job creation since real GDP and the financial development variables had at least one stochastic trend in common. This finding highlights the importance of a well-developed financial system in contributing to long-term economic growth and job creation, which is crucial for Nigeria's economic development.

Iheanacho (2016) used the Auto-Regressive Distributed Lag (ARDL) approach to co-integration analysis to examine the impact of financial development on employment creation in Nigeria between 1981 and 2011. Evaluating the short- and long-term relationships between financial development and job creation was the goal of the study. The results showed that there was an insignificantly negative long-term link between financial development and employment generation, suggesting that financial development may not have a substantial long-term impact on job creation.

Monogbe *et al*. (2016) used time series data from 1986 to 2014 to examine how financial development affected the creation of jobs in Nigeria. The study looked at the short- and long-term relationships between financial development and job creation using a parsimonious error correction model (VECM). The findings showed that creating jobs is a major factor in the growth of the financial sector in Nigeria, suggesting a two-way interaction in which job creation both impacts and is influenced by the financial sector's development.

Gaps identify in the Literatures

The thorough application of conventional financial development measures like financial stability, financial depth, financial efficiency, and financial access is noticeably lacking, despite the large number of studies on the relationship between financial development and employment in Nigeria. While existing research often employs basic measures like credit to the private sector or market capitalization, it frequently overlooks how these traditional indicators individually and collectively affect industrialization. Financial stability, financial depth, efficiency, and access each play critical roles in shaping the industrial landscape, yet their distinct impacts and interactions with industrial performance are underexplored. Addressing this gap by analyzing how these

traditional indicators influence industrialization can provide a more nuanced understanding of the financial sector's role in fostering industrial growth and guide more targeted policy interventions.

RESEARCH METHODOLOGY AND MODEL SPECIFICATION

This study utilizes time series data, employing a non-probability sampling technique, and covers the period from 1990 to 2023. The selection of this time frame is influenced by the availability of relevant data and the significant financial developments that occurred during this period. To ensure the accuracy of the results, pre- and post-estimation tests was conducted. To verify the stationarity of the variables, these include unit root tests like the Augmented Dickey-Fuller (ADF) test. The study will examine the short- and long-term connections between financial development and job creation using the Vector Error Correction Model (VECM). Because it can identify both short-term adjustments and long-term equilibrium relationships, the VECM is especially appropriate given the dynamic nature of these variables. The Vector error correction mechanism (ECM) will be incorporated to address short-term deviations from long-term equilibrium, providing a more reliable analysis of the interaction between financial development and employment. Data for Financial Development indicators were taken from the World Bank's 2024 edition of the World Development Indicators, and the Central Bank of Nigeria's (CBN) 1990–2023 Statistical Bulletin and the International Labour Organisation (ILO) provided employment data.

Model Specification

The data for this study will be analysed using the Vector Error Correction Model (VECM). An effective econometric model for studying both short-term dynamics and long-term interactions between co-integrated variables is the VECM. Proposed by Johansen (1988), the VECM builds on the Vector Autoregressive (VAR) framework but incorporates error correction terms to account for deviations from the long-term equilibrium. This model is particularly appropriate for variables integrated of the same order and co-integrated, as it efficiently captures both the equilibrium relationships and the adjustment dynamics toward that equilibrium.

By using the VECM, this study aims to investigate the co-integration relationships among the variables, ensuring a comprehensive analysis of their interactions both in the near and far future.

Thus, the equation becomes:

$$EMP = f(FIDPT, FIDST, FIDEFF, FIDACC, INF) \quad (1)$$

Equation (1) can further be can econometrically specified as:

$$EMP = \beta_0 + \beta_1 FIDPT + \beta_2 FIDST + \beta_3 FIDEFF + \beta_4 FIDACC + \beta_5 INF + \mu t \quad (2)$$

Hence, this model is transformed into the VECM bound model as below:

$$\Delta EMP\ t = \propto_o + \propto_1 FIDPTt\text{-}i + \propto_2 FIDSTt + \propto_3 FIDEFFt\text{-}i + \propto_4 FIDACCt\text{-}i + \propto_5 INFt\text{-}I \quad (3)$$

The VECM framework requires capturing dynamic interactions among all variables in the system. To account for these multi-directional relationships, we introduce a vector of coefficients ($\sum bi$) representing the cumulative short-term effects of lagged values of each variable (financial depth, stability, efficiency, access, and inflation) on employment. This approach aligns with Johansen's (1988) methodology, where vector coefficients are essential to model both short-run adjustments and long-run equilibrium paths in cointegrated systems.

$$\sum \beta_1 FIDPTt\text{-}1 + \sum \beta_2 FIDSTt\text{-}i + \sum \beta_3 FIDEFFSt\text{-}i + \sum \beta_4 FIDACCt\text{-}i + \beta_5 \Delta INFt\text{-}I + \psi ECT\ t\text{-}i + \varepsilon\ t \quad (4)$$

Where:
Y (Dependent variable) EMP = Employment
X_1 (Independent) FNDT = Financial Depth
X_2 (Independent) FNST = Financial Stability
X_3 (Independent) FNEF = Financial Efficiency
X_4 (Independent) FNAC = Financial Access
X_5 (Independent) INF = Inflation
ε (ECT) = Term for Error Correction
β_1, β_2, β_3 and β_5 = Short-run coefficients of the variables
$\propto_1$, $\propto_2$ $\propto_3$ and $\propto_4$ = matching long-term multipliers of the ARDL model that underlies it
$\propto_0$ = constant parameter
Δ = Operators for first differences
$\sum bi$ is the vector containing the model's variable coefficients, and ε t is the white noise error term.

DATA ANALYSIS AND INTERPRETATION OF RESULTS

Regression analysis was utilized to assess how financial progress affects employment rate in Nigeria. Given the varying units of measurement, the data was transformed into logarithmic form to standardize it for analysis. Furthermore, pre and post-estimation diagnostic tests were carried out to determine the data's stationarity and validate the assumptions underlying the Ordinary Least Squares (OLS) technique.

Descriptive Analysis

The results above showed that the average value for employment was 61.627333, while the average for financial depth was 1.096039, which is a low average indicating limited penetration of financial services considering the magnitude of Nigeria's economy and financial stability averaged 2.016471, indicating a moderate stability, but with room for improvement to prevent banking crises.. Financial efficiency recorded a mean value of 8.279489, indicating higher value suggests banks were generally effective in converting deposits to credit. Financial access averaged 0.793212, very low, revealing that many Nigerians lacked basic financial services like bank accounts. And inflation had an average of 18.60876 indicating a high average reflects Nigeria's persistent price instability, which erodes purchasing power. The median values for employment and financial depth were 61.312433 and 1.006234, respectively, while financial stability and financial efficiency had medians of 2.003411 and 8.152312. Financial access and inflation recorded median values of 0.323452 and 19.34546. The minimum value for employment was 60.758998, with financial depth and financial stability recording minimums of 0.6981005 and 1.731508, respectively. Financial efficiency, financial access, and inflation had minimum values of 1.018284, 0.577491, and 5.388001, respectively. The maximum values observed were 64.353996 for employment, 2.948186 for financial depth, 4.568945 for financial stability, 26.51656 for financial efficiency, 3.304491 for financial access, and 72.83550 for inflation. The standard deviation showed variability, with employment at 0.7866972, financial depth at 0.4382184, financial stability at 0.5156774, financial efficiency at 4.124713, financial access at 0.5104395, and inflation at 16.0294. Variance values were 0.6188925 for employment, 0.1920354 for financial depth, 0.2659231 for financial stability, 17.01326 for financial efficiency, 0.2605485 for financial access, and 256.9417 for inflation. Skewness indicated varying degrees of asymmetry, with 2.341653 for employment, 3.220713 for financial depth, 4.156105 for financial stability, 2.74123 for financial efficiency, 4.166593 for financial access, and 2.143506 for inflation. Kurtosis values suggested significant peakedness in the data distribution, with 8.343279 for employment, 13.11657 for financial depth, 13.2422 for financial efficiency, 19.869 for financial access, and 6.664365 for inflation. The analysis covered 33 observations over the study period, ensuring robust statistical insights. Descriptive statistics show Nigeria's financial sector has low depth and access, suggesting limited financial inclusion which constrains employment opportunities.

Table 1: Summary of descriptive statistic

	Employment	Financial Depth	Financial Stability	Financial Efficiency	Financial Access	Inflation
Mean	61.627333	1.096039	2.016471	8.279489	.793212	18.60876
Median	61,312433	1.006234	2.003411	8.152312	.323452	19.34546
Minimum	60.758998	.6981005	1.731508	1.018284	.577491	5.388001
Maximum	64.353996	2.948186	4.568945	26.51656	3.304491	72.83550
Std.dev	.7866972	.4382184	.5156774	4.124713	.5104395	16.0294
Variance	.6188925	.1920354	.2659231	17.01326	.2605485	256.9417
Skewness	2.341653	3.220713	4.156105	2.74123	4.166593	2.143506
Kurtosis	8.343279	13.11657	4.156105	13.2422	19.869	6.664365
No of obs	33	33	33	33	33	33

Source: Authors computation, 2024

Traditionally, economic variables are assumed to be stationary; however, this assumption often does not hold due to the inherent non-stationarity of many economic variables. Using non-stationary data can result in spurious and misleading outcomes. To address this, differencing the variables is necessary to achieve stationarity. According to Box and Jenkins (1978), non-stationary time series at their original levels can be transformed into stationary series by taking their first differences and probably second differences. To ensure stationarity, the results of the Augmented Dickey-Fuller (ADF) test are compiled in the table below.

Table 2: Augmented Dickey Fuller

Variables	Level	ADF Critical Value	First difference	ADF Critical Value	Order	Remark
Employment	0.9892.	-2.980	0.0022.	-2.983	*I(1)*	Stationary at first difference
Financial Depth	0.9974	-2.980	0.0056.	-2.983	*I(1)*	Stationary at first difference
Financial Stability	1.0000	-3.702	0.9109.	-3.709	*0(0)*	Not Stationary at any difference
Financial Efficiency	0.5523	-3.702	0.0000.	-2.983	*I(1)*	Stationary at first difference
Financial Access	1.0000	-3.702	0.0000.	-2.986	*I(2)*	Stationary at first difference
Inflation	0.2431	-3.702	0.0000.	-3.709	*I(1)*	Stationary at first difference

Source: Authors computation, 2024

Stationarity results confirm VECM is valid. However, financial stability's non-stationarity indicates systemic risks remain unresolved, weakening employment resilience. Not all variables are stationary at initial difference integration, as demonstrated by the unit root test in Table 2 above., financial access was stationery, indicating that improving financial inclusion (e.g., mobile banking) may have delayed but cumulative effects on employment and financial stability remain not significant at all levels indicating persistent instability (likely from recurring banking crises) undermines employment growth. Strengthening prudential regulations is urgent and inflation stationary at first difference revealing that inflation shocks temporarily affect employment, but effects fade quickly. Monetary policy should target inflation control to stabilize job markets.

For this study, the Johansen Cointegration Test was applied, which is based on the Vector Error Correction (VEC) model. This test helps to identify the number of co-integrating relationships among the variables and assess the long-term equilibrium. It involves two primary tests: the Trace test and the Maximum Eigenvalue test, which provide information on the rank of the cointegration matrix and the number of co-integrating vectors.

Table 3: Johanson test for cointegration Johanson test for cointegration

Trend: Constant **Number of obs = 30**

Sample: 1994 thru 2023 **Number of lags = 1**

Maximum Rank	Params	LL	Eingenvalue	Trace Statistic	Critical Value 5%
0	6	-177.37793	-	250.6300	94.15
1	17	-120.77716	0.97703	137.4285	68.52
2	26	-93.583279	0.83682	83.0407	47.21
3	33	-74.417116	0.72133	44.7084	29.68
4	38	-60.265859	0.61070	16.4058	15.41
5	41	-53.650889	0.35661	3.1759	3.76
6	42	-52.062938	0.10045		

Source: Authors computation, 2024

The Johansen test: The findings show that the variables under investigation have long-term equilibrium relationships. The null hypothesis is rejected for ranks 0 through 4 because the trace statistics for these ranks are higher than their corresponding 5% critical values. This implies the existence of multiple cointegrating relationships, specifically up to five. At rank 5, the trace statistic is lower than the critical value, suggesting that no additional cointegrating relationships exist beyond this point. These findings confirm that the variables are cointegrated, making the Vector Error Correction Model (VECM) an appropriate framework for identifying long-term equilibrium relationships as well as short-term dynamics in the data.

Table 4: VEC Model (Vector Error Correction Test)

Equation	Parms	RMSE	R-sq	Chi^2	$p>chi^2$
D_demp1	6	.420298	0.3909	15.40309	0.0173
D_dfndt	6	.192236	0.6706	48.85522	0.0000
D_dfnst	6	.21326	0.4767	21.86291	0.0013
D_dfnst	6	2.65944	0.8147	105.5246	0.0000
D_dfnef	6	.188052	0.7594	75.73988	0.0000
D_dinf	6	9.18706	0.6639	47.40281	0.0000

Source: Authors computation, 2024

The short-term dynamics of the system's variables are revealed by the Vector Error Correction Model (VECM) results as well as their adjustments toward long-term equilibrium. All equations are statistically significant ($p < 0.05$), indicating meaningful short-term relationships. The equation for financial efficiency (D_dfnef) has the highest explanatory power, with an R-sq of 81.47%, followed by financial access (D_d2fnac) with an R-sq of 75.94%. Financial depth (D_dfndt) and inflation (D_dinf) also exhibit strong explanatory power, with R-sq values of 67.06% and 66.39%, respectively. Financial stability (D_dfnst) explains 47.67% of the variation in its changes, while employment (D_demp) has the lowest explanatory power, with an R-sq of 39.09%, though it remains statistically significant ($p = 0.0173$, $p = 0.0173$).

These results highlight robust short-term dynamics among the variables, with financial efficiency and access being the most responsive in the short run, while employment shows relatively weaker but significant short-term adjustments. Financial development explains 39.09% of variation in employment, leaving over 60% explained by other structural and policy factors not included in this study.

Post-estimation tests are diagnostic checks performed after estimating a model to ensure that it fits well and that the assumptions underlying the model are met. These tests validate the robustness, accuracy, and reliability of the model's results.

Shapiro-Wilk test was employed to perform the normality tests. The normality test are generally applied to the residuals from regression or time series models, as the assumption of normality typically applies to the error terms rather than the dependent or independent variables themselves. However, in some cases, it may also be applied directly to the variables themselves if their distribution is of concern**.** The Shapiro-Wilk test results for the variables tested indicate that all the variables are not dispersed normally. The results of the Shapiro-Wilk test for normality below indicate that none of the variables employment (emp), financial depth (fndt), financial stability (fnst), financial access (fnac), and inflation (inf) follow a normal distribution. For all variables, the null hypothesis that the *p*-values are less than 0.05 is rejected. Variables are normally distributed. Therefore, it can be concluded that all five variables are not normally distributed.

The table below shows the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity, assuming normal error terms and using the fitted values of employment (EMP), the test returned a Chi-square value of 0. 52 with a 0.4727 *p*-value. Since the *p*-value is much higher than 0.05 at the 5% significance level, we are unable to rule out the null hypothesis of constant variance.

Table 5: Shapiro-Wilk test Table

Variables	Obs	W	v	z	Prob>z
Employment	33	0.70715	9.998	4.789	0.00000
Financial Depth	33	0.56446	14.869	5.614	0.00000
Financial Stability	33	0.41300	20.040	6.235	0.00000
Financial Access	33	0.36972	21.517	6.383	0.00000
Inflation	33	0.67323	11.156	5.017	0.00000

Source: Authors computation, 2024

Table 6: The Breusch-Pagan/Cook-Weisberg test

chi2(1)	Prob > chi2
0.52	0.4727

Accordingly, the assumption of homoscedasticity in the residuals is supported since there is no indication of heteroscedasticity in the model.

DISCUSSION OF FINDINGS

The VECM co-integration test result showed that, at the 5% significance level, the null hypothesis could be readily rejected. There is a steady state of long-term equilibrium between the dependent and independent variables since the calculated trace statistic for each variable is higher than the upper critical bound value at 5%. The results showed that financial development had positive and statistically significant relationship with employment level in Nigeria over the period under consideration; which ultimately means the acceptance of our alternate hypothesis that the financial development has influence on the employment level. There was also an existence demonstrating a statistically substantial and favourable correlation between financial progress and employment. In furthermore, inflation had a positive coefficient and statistically significant to the industrial output. The model is moderate as the goodness of fit is very good. The vector error correctional model (VECM) indicates that large portion of variation in employment level in Nigeria was explained by the variation in financial depth at 67.06%, financial stability at 47.67%, financial efficiency at 81.47%, financial access at 75.94.61% and government spending at 66.39%.

CONCLUSION

Based on the study's analysis and conclusions, it can be said that creating jobs is a key factor in Nigeria's economic expansion. Although it is not statistically significant, the estimated coefficient for employment in the prior period had a positive, albeit statistically insignificant, effect on current employment, indicating that a rise in employment in the prior period helps to drive growth in employment in the current period.

The study also discovered that the creation of jobs in Nigeria is positively and statistically significantly impacted by financial development. This suggests that improvements in the financial sector directly contribute to increased employment. All variables in the model were discovered to have statistically significant positive coefficients effects on employment generation, indicating that efforts to enhance financial development would likely result in a substantial increase in employment opportunities. Furthermore, inflation was shown to influence that is both favourable and statistically significant, implying that increased government expenditure stimulates employment creation in the economy**.** Overall, the study emphasizes the critical importance of prioritizing the development of Nigeria's financial sector to foster economic growth, reduce unemployment, and improve living standards. Policies aimed at strengthening financial development and increasing access to capital can stimulate job creation, enhance productivity, and drive economic progress. By harnessing the potential of financial systems, Nigeria can unlock opportunities for sustainable employment generation and economic advancement, ultimately improving the well-being of its population and ensuring long-term prosperity.

RECOMMENDATIONS

Considering the results of this investigation, this paper provides key policy recommendations to enhance employment generation in Nigeria through

financial development. Simplified wording, avoided repetition of 'recommendations

Expanding financial services for SMEs and the informal sector, key drivers of job creation, is essential. Initiatives like microfinance, mobile banking, and broader credit facilities can enhance financial inclusion, stimulate employment and enhancing the operational efficiency of financial institutions is crucial to allocate resources effectively to high-employment sectors. This includes strengthening banks capacity to offer tailored financial product for various industries (Odio *et al*., 2021)

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