

Pos Business and Fraud: How Are They Shaping Employment in Nigeria?

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ABSTRACT

This paper will explore how employment in Nigeria will be affected by POS Business, POS Fraud and inflation between 2013 and 2024. It examines the impact of the growth of POS terminals and services on job creation and also evaluates the impacts of the possible adverse impacts of POS fraud and macroeconomic volatility. A secondary data was used in the study as the ex-post facto research design based on the Central Bank of Nigeria (CBN) Statistical Bulletin, Financial Institutions Training Centre (FITC), and World Bank Development Indicators. The relationships between the variables were analyzed using descriptive statistics, correlation analysis and Ordinary Least Squares (OLS) regression. The findings indicate that employment is greatly positively influenced by POS Business and the number of POS terminals increases employment especially among young people and small-scale entrepreneurs. The POS Fraud and inflation have negative coefficients but not statistically significant meaning that they have weak or indirect effects on employment and could be compensated by a rapid POS growth. Recommendations are made to the important stakeholders based on these findings. The government must use incentives and policies to aid in the growth of POS and financial inclusion. CBN ought to enhance infrastructural facilities, fraud control as well as macroeconomic stability. Banks are supposed to train POS operators and to check the transactions and the POS operators, they ought to practice safe methods so that they do not commit fraud and they can remain in employment. All in all, it can be seen that the primary cause of the employment growth in Nigeria is POS Business, and the POS Fraud and inflation cause the effect, albeit secondarily and indirectly. The results support the policy actions to boost the employment by way of digital financial innovations.

Keywords: POS, Fraud, Inflation, Employment, Nigeria

INTRODUCTION

With the introduction of the Point of Sale (POS) services in Nigeria, the financial world has been made to change and new opportunities have been provided in terms of employment opportunities particularly to the youths and small business owners. With the banking industry coming up with different avenues to facilitate cash transfer, POS system rapidly emerged as one of the most rapidly expanding retail payment technologies in the nation (Gloria, 2022). The central bank of Nigeria (CBN) launched the POS system as part of its Cashless Nigeria Policy to ease the burden on the banking halls and enhance financial inclusion (Adewale, 2024). The system has over the years grown into urban and rural communities bridging a significant service gap.

This development of POS business has created a lot of employment opportunities. This has made POS operations a source of income to many of the young people, graduates, undergraduates, and small entrepreneurs (Augustine et al., 2023). POS business has low entry barriers as opposed

to the formal qualifications needed in traditional banking careers and hence the youths can easily set kiosks, shops or even mobile businesses at a low startup level. This also leads to an increment in the employment rate in the country due to the rise in the number of POS terminals and agents since more people are employed in self-employment or other micro-enterprise ventures (Adewole et al.,2022). Therefore, POS Business is a channel of creating jobs, generating income, and an economic process at the community level, and it is directly connected with the employment rate in Nigeria.

Nevertheless, even with this favorable role played by POS business in employment, there is growing concern over the rising number of POS frauds in the country. There are numerous variants of POS Frauds, such as card-theft fraud, cloned card transactions, false confirmations of transfer, agent password compromise, fraudulent withdrawals, and manipulating the systems (Imade & Evbayiro-Osagie, 2025). With the escalation of fraud attacks, direct financial losses, insecurity, and closure of businesses are being recorded by various POS operators, some operators have closed their business after several losses or fear of attacks (Ibekwe, 2021). The job opportunities that the POS system has generated start to decline when it occurs at a large scale (Adewole et al.,2022). This implies that POS Fraud is negatively correlated with Employment rate, where an increment of fraud would discourage the current operators, decrease profitability, elevate risks, and prompt the business to pull out. Additionally, increasing insecurity that comes with POS operations including theft, agent attacks, and fraudsters harassing agents has been a significant issue (Ubi et al.,2025). These issues make the business environment uncertain and thus discourage new entrants and influence the sustainability of already created jobs in the sector. Hence, although, POS Business is a positive factor in employment creation in Nigeria, POS Fraud negates this benefit and diminishes the viability of employment created in the course of agent banking business.

Inflation is another significant indicator of employment in Nigeria. Nigeria has been characterized with a chronic case of inflation which has been as a result of currency devaluation, the cost of living, fuel inflation, food inflation and an increment of cost of conducting business (Adewale & Adeyemo, 2024). High inflation lowers the buying capacity of the people and it hikes the price of operating POS businesses including rent, fueling generators, internet linkage data and security (Adewale, 2025). To the POS operators, these increased costs diminish their profitability and they are not able to run their day-to-day businesses. Most of the small operators are forced to either close down or reduce their operations when inflation is high, and this has a detrimental impact on the rate of employment once again (Adewale & Adeyemo, 2024). Therefore, inflation is an external macroeconomic force that regulates or tempers the association amid POS activities and employment and POS Business has a tendency of boosting employment, high inflation tends to erode this effect whereas POS Fraud diminishes employment, and high inflation tends to enhance this negative impact.

Notwithstanding the booming nature of POS business in Nigeria and the role played in creating employment opportunities, the industry is currently being threatened by increasing fraud and a constantly high rate of inflation. Despite the fact that POS operations have provided an income source to a significant number of youths and small business people, the increasing numbers of POS fraud, including counterfeit transfer, card related frauds, etc., have cost numerous people money, fear, and closure of numerous agent outlets (Nuel-Okoli, et al., 2025). It goes against the jobs that the industry was generating in the first place. Concurrently, high inflation has been fueling the increase in operational expenses, decline in profit margins, and unsustainability of POS enterprises. With the continued growth of POS Business, POS Fraud and inflation can be

diminishing its capacity to sustain jobs in the country. Nonetheless, the effect of joint influence of these factors on the employment rate in Nigeria is not fully evidence-based. This knowledge gap leads to the necessity to investigate the way that POS business and fraud are determining the employment outcomes in Nigeria. The primary goal of the research is to analyse the challenge of POS business and POS fraud influencing the employment in Nigeria. Other particular objectives are to: establish the influence of POS business development within employment rate in Nigeria; investigate the influence of POS fraud on employment rate in Nigeria; evaluate the effect of inflation on employment rate in Nigeria.

Although point-of-sale (POS) business is rapidly expanding in Nigeria and increasingly playing a significant role in delivering financial services and job opportunities, the industry is now facing an increase in the number of fraudulent activities that affect the POS system and a constantly high level of inflation. Although POS activities have generated revenue to hundreds of young people and small businesses, loss through fraud and increased cost of operation are jeopardizing the existence of such jobs. Nevertheless, there is limited empirical evidence on the combined effects of the three variables on the employment outcomes in Nigeria, and those are POS business expansion, POS fraud, and inflation. The lack of clean evidence on the national level does not allow the policymakers to develop informed strategies that would allow them to maximize the employment benefits of the operations of POS and reduce the risks associated with it.

Existing researchers have primarily analyzed the role of POS operations in terms of employment or the development of small businesses based on localized surveys or cross-sectional data (e.g., Augustine et al., 2023; Nwangwu, 2024), whereas other researchers have given little consideration to the linkages in terms of the outcomes of employment (Ibekwe, 2021; Imade and Evbayiro-Osagie, 2025). In addition, inflation research in Nigeria has tended to focus on macroeconomic growth as opposed to employment impacts on a specific industry (Adewale and Adeyemo, 2024). Thus, it lacks national time-series data that simultaneously explores the overall effects of POS business expansion, POS fraud, and inflation on the employment in Nigeria. The gap restricts the knowledge of the nature of the dynamic and long-run relationships between these variables at the aggregate level.

This research is valuable to the literature because it is a national time-series investigation of how POS business activities, POS fraud, and inflation influence the employment in Nigeria between the year 2013 and 2024. The basis of the research is secondary macro-level data and Ordinary Least Squares (OLS) estimation, unlike earlier studies who mostly use cross-sectional or regional data to determine the effect of POS expansion on employment at the economy level. The research combines fraud and inflation on the same empirical system, giving a more thorough insight into both technological and macroeconomic aspects that impact the result of employment. The results are thus an addition to the existing evidence and give policy-related information on how digital financial innovation should be encouraged to ensure that employment is generated in Nigeria.

LITERATURE REVIEW

Concept of POS Business and Employment Creation

The Point-of-Sale (POS) business in Nigeria has expanded at a high rate as a part of the cashless policy implemented by the Central Bank of Nigeria to increase access to financial services and minimize the use of physical banking halls (Ibekwe, 2021) POS agents are the micro-financial

service providers which provide withdrawals, transfers, deposits, and bill payments to the community members (Osifodunrin & Lopes, 2025). The POS business has provided young people, graduates and small businesses with a valuable source of livelihood because the startup cost is quite low and has minimal formal requirements. Some people work full-time or part-time in the POS activities as their source of revenue, thus adding to the employment rate in Nigeria. With the proliferation of more terminals, as well as agents, coming into the market, job prospects get bigger via self-employment and through business growth (Seyoum, 2024). Thus, it is determined that POS business development is closely connected with the employment, sources of income, and inclusion into the financial sphere, which is why it is an important participant of labour absorption in the Nigerian economy.

The POS business in Nigeria is an expanding entrepreneurial industry that is likely to offer financial services including withdrawals, deposits, transfers, and bill payments using POS technology. POS Business involves income generating and gainful employment related to running POS terminals and most of these are by young people, graduates, and small-scale entrepreneurs. That is why POS Business is not only an innovation of the technological field but also an essential source of jobs and financial inclusion in the Nigerian economy (Osifodunrin & Lopes, 2025; Seyoum, 2024).

Concept of POS Fraud and Its Implications for Employment

The POS fraud is defined as unlawful or fraudulent actions that are performed by the use of Point-of-Sale terminals and most of the time lead to the loss of money to agents, banks or customers (Obi, 2023). Some of the common ones are fake transfer warnings, fraud, identity theft, manipulation of the chargebacks, and intentional disruptions of the systems by the fraudsters. The sophistication of the fraud activities in Nigeria has posed a lot of risks to POS operators in Nigeria. The result is repeated losses, business interruptions, as well as insecurity experienced by many agents with some opting to close down their operations (Sylvanus & Bupo, 2024). These shutdown of businesses decrease the amount of feasible POS businesses, and thus curtail the employment opportunities that the sector already generated. By doing this, POS fraud implies negatively on employment in the country. The more cases of fraud, the higher the possibility of the operators to exit the market or even the potential entrepreneurs not to enter the business (Karpoff, 2021). Therefore, POS fraud is a significant challenge to job security and general employment increment in the agent-banking sector.

Concept of Inflation and Employment Dynamics in Nigeria

Inflation is defined as average and persistent rise in the prices of goods and services as time progresses and minimizing the purchasing power of households and making business expensive (Adewale, 2025). The inflation rate in Nigeria has been high and has been so with factors like, depreciation of its currency, rise in fuel prices, inflation of food prices and an increase in the costs of operating. In the case of POS operators, inflation influences the major inputs of the business-like shop rent, data cost, security cost, power supply fuel cost, and the overall cost of living (Atanasov, 2022). With such increment in costs, profit margins are remaining smaller thus rendering continuity of the small POS business more challenging. The positive effect of POS business growth which is likely to be created by high inflation can therefore be diminished. Moreover, inflation can aggravate the adverse effect of POS fraud by increasing the difficulty to recuperate the losses. All in all, the moderating element of inflation in the employment outcomes of the POS industry is

crucial, as it affects the ability of businesses to survive and the potential of creating jobs (Nuel-Okoli et al., 2025).

Theoretically, one can explain the relationship between inflation and employment through the Phillips Curve which assumes a short-run trade-off between inflation and unemployment, where it is argued that moderate inflation can be related to higher employment because aggregate demand increases (Phillips, 1962). According to Keynesian theory, increased demand in the economy can give a boost to output and employment in the short run, but in the long run, continued inflation can destroy the real incomes and dim the growth of business. Nevertheless, in the developing economy such as Nigeria, the structuralist school of thought holds that inflation is usually triggered by structural rigidities of supply, structural bottlenecks of infrastructure, and depreciation of the exchange rate and imbalance of sectors that are bound to raise the cost of production and limit growth of output and employment. As such, instead of causing employment, inflation in such a setting can undermine the sustainability of a business and diminish the employment prospects, especially to small-scale businesses like POS operators.

Theoretical Review

Innovation Diffusion Theory

The Innovation Diffusion Theory describes the process of the spread of new technologies or ideas in the society and the factors that determine their implementation. Rogers (2003) posits that innovations diffuse in phases, which are knowledge, persuasion, decision, implementation, and confirmation. The POS business is also within this theory as it can be treated as a technological solution that is being offered to make payments easier and more financially inclusive. With the spread of the POS technology in Nigeria, more people are using it as a business opportunity thus creating more jobs. Favorable factors like low capital requirement, ease and increased demand in the market enhance adoption. Nevertheless, POS fraud may reduce the diffusion process or distort it discouraging new entrants and generating a lack of trust in the system. Thus, IDT is useful in explaining the development of POS business and the impact of fraud on its adoption rate, which consequently has an impact on the level of employment in Nigeria.

Efficiency Wage Theory

According to the Efficiency Wage Theory, organisations should remunerate employees with higher wages than the market rate to enhance the productivity of the worker, lower turnover, and acquire superior employees. Even though the theory was traditionally used to refer to formal employment, it is also applicable in micro-business like the POS operation. POS agents are usually small business owners and the stability of their business predetermines the income they get. With a stable POS business environment, where there is minimal fraud, moderate inflation and high transactions; the operators make more profits, they are motivated and they will remain in business. This helps in retaining jobs and attracting more entrants to the industry. Nevertheless, in the case of fraud rates increase or inflation, the incomes of POS operators decrease. Declining profitability will deter individuals to remain in the business or venture into the business which will lead to a decline in employment in the industry.

Theoretical Framework

The guiding theory used in the study is the Innovation Diffusion Theory (IDT) since it is most appropriate in explaining the effects of POS business activities on employment in Nigeria. The POS operations are a financial innovation that has spread fast within the rural and urban communities. IDT states that perceived benefits, simplicity, and economic returns of an innovation determine the rate of its adoption by individuals. These qualities are also congruent with POS business, as it has low entry barriers and high-income potential, which is a positive factor in terms of employment. Nevertheless, the theory is also aware of the presence of barriers or negative experiences that may slow the adoption and deter involvement, e.g. POS fraud. Fraud decreases trust and confidence on the innovation and some operators will quit the business and the employment gains will be watered down. The other interplay of inflation is with adoption because it will influence the costs of operations. Thus, IDT offers a detailed description of the interaction of POS business, fraud, and inflation to determine the consequences of employment.

Empirical review

Imade and Evbayiro-Osagie (2025) examined the influence of electronic banking services on the instances of fraud in the deposit money banks in Nigeria. The research enlisted the secondary information to analyze the trends in ATM, POS, internet and mobile banking channels in a bid to identify their effect on financial fraud. The analysis was descriptive in nature indicating that there was a drastic increase in the electronic transactions that were coupled with increase in fraudulent activities within the banking sector. The study discovered that even though e-banking is more convenient to the customer and enhances financial inclusivity, it also predisposes the e-banking to cyber and operational risks. Another conclusion reached by the authors was that adequate fraud prevention mechanisms, better cybersecurity mechanisms and more stringent regulatory measures would be necessary to ensure that the people remain safe and assured with the digital financial environment of the banking sector in Nigeria.

Nuel-Okoli *et al.* (2025) investigated the impact of small-scale businesses in job creation in the Anambra State, Nigeria institutions (point of sale (POS) activities, real estate development, fast food restaurants, and e-commerce shops). Data collection and analysis were done using questionnaires and ordinary least squares (OLS) regression using survey research design. The results indicated that the overall impact of all the small-scaled businesses selected was positive and significant in creation of jobs. In particular, the t-statistic of POS operations was 2.533 with a p-value of 0.012 which is statistically significant at 5% level. The researchers concluded that small-scale enterprises play a pivotal role in creation of employment within the state of Anambra and suggested the government to provide regulations to ensure the protection of the POS customers and provide them with a greater adoption.

In the study by Adewale and Adeyemo (2024), the authors explored the impact of unemployment and inflation on the growth of the Nigerian economy in the period of 1999 to 2021 on the time-series basis. The research used descriptive statistics, trend analysis, and regression techniques to investigate the relationships of the variables. The results show that unemployment is negatively related to the growth of the GDP but inflation has significant positive relationship with the economic growth. The model predicts about 54.1 percent of the variation of GDP growth and this indicates that unemployment and inflation play an important role in determining the performance of the Nigerian economy. The research suggests policies that should regulate the

inflation, encourage job creation and diversification of the economy to boost sustainable and inclusive growth. These results highlight the importance of macroeconomic stability in promoting the economic growth.

Nwangwu (2024) examined how the Point of Sale (POS) businesses can generate employment by alleviating unemployment in Awka in Anambra State. The research was dedicated to the mobile POS, table-based POS, and online POS activity and used the descriptive cross-sectional survey design. Primary and secondary sources were used to collect data on 400 respondents who sampled 2,540 registered POS operators. Frequency counts, percentages, correlation, and simple regression were used to analyze. Results showed that POS in table and mobile minimized unemployment significantly and mobile one had a significant effect, whereas online POS had no effect. The research advised that the government and deposit money banks should ensure that POS is aggressively adopted in order to increase employment rates even more. This study has highlighted the significance of online financial solutions in alleviating unemployment in urban Nigerian settings.

Augustine *et al.* (2023) analyzed the effects of the Point of Sale (POS) operations on employment creation in the Nsukka Urban, Enugu State, Nigeria, between 2012 and 2021. The research employed the Diffusion of Innovation (DOI) theory to evaluate the contribution of mobile banking towards economic activities through the use of documentary and descriptive survey techniques and content and quantitative analysis. Results indicated that the growth of POS machines (155,462 in 2017 to 542,109 in 2021) caused a significant development of the small-scale business and contribution to lowering the level of youth unemployment in the region. As well, more POS use generated more income among vendors. The research suggests that financial institutions should introduce specific sensitization and education on the actions of POS and security to promote further use. In this study, the application of digital financial innovations in enhancing urban Nigeria employment and entrepreneurship opportunities has been portrayed as essential.

In his study, Obi (2023) explored how criminal activities affect the business activities of Point of Sale (POS) in Karu Local Government Area, Nasarawa state, Nigeria. The researchers utilized primary data of 20 companies operating in different industries like pharmaceuticals, electronic, agro-allied, education, telecommunications, and retail, through questionnaires that were based on Technology Acceptance Model. The results showed that POS operations are imperative in the successful business transactions since they are electronic and are susceptible to criminal activities like fraud and financial crimes. Inclusion of proper infrastructure such as a good internet connection and strict compliance with the financial inclusion and agent banking policies were also highlighted in the study. Some of the recommendations would be frequent training of POS operators, better systems of monitoring transactions, proper records keeping, licensing of trustworthy operators and adherence to regulations of Central Bank of Nigeria.

Adewole *et al.* (2022) focused on how the Point of Sale (POS) business impacts the creation of jobs in Nigeria between 2009 and 2021. The study, based on the official data of the Central Bank of Nigeria and adopted regression analysis and the Autoregressive Distributed Lag (ARDL) approach, revealed that the adoption of POS positively and significantly influences the creation of jobs. In particular, POS trade was a positive factor in low-skilled employment, but it did not have a significant effect on the level of employment in comparison with the overall population. The research suggests that government and deposit money banks should promote the use of POS

systems, offer efficient network infrastructure to facilitate transactions and support POS operators, thus, creating more jobs and financial inclusion in the entire of Nigeria.

Ibekwe (2021) addresses the issue of electronic fraud, which affects the performance of the deposit money bank in Nigeria within the period 2009-2020 (12 years). To accomplish this, the Automated Teller machine Fraud (ATMF), the Mobile Payment System Fraud (MPSF), the Web/Internet Banking Fraud (WIB) and the Point of Sales fraud (POSF) were employed as indicators of Electronic fraud regarding financial performance proxy of Deposit Money Banks in Nigeria. The used study made used aggregate secondary data of the period of the study of the Nigeria Deposit Insurance Corporation (NDIC). Through the correlation analysis and the Multiple Regression analysis was adopted the co-movement of the independent variables with respect to the dependent variable was established.

METHODOLOGY

The research design used in this study is ex-post facto research design since the research relies on historical data, which cannot be manipulated by the researcher. The goal is to investigate the effect of POS business expansion, POS fraud cases, and inflation on the employment outcome in Nigeria between the year 2013 and 2024. All the variables are applied using secondary data.

In the current research, POS Business (POSB) will be calculated by the total number of active POS terminals in Nigeria per year, which is provided by the Central Bank of Nigeria Statistical Bulletin. POS Fraud (POSF) is calculated based on the amount of reported loss of POS-related frauds (In naira) every financial year as reported by the Financial Institutions Training Centre (FITC) reports. Inflation (INF) is the percentage change in the consumer price index calculated on annual basis whereas Employment rate (EMP) is the percentage of the working-age population in employment which is collected by the World Bank Development Indicators. The use of all variables in their level form is to maintain their original economic meaning and also since the aim of the study is to test the absolute effect of any changes in POS activities and fraud losses on employment outcomes. Despite the large magnitudes in POSB and POSF, the level specification is used to ensure uniformity with the data format and to be able to interpret the data directly in terms of actual changes in terminals and values of fraud.

Some of the econometric tools that are used in the study include descriptive analysis, correlation tests and regression analysis to establish the relationship between the variables. The time-series analysis is supported by the fact that the data has a structure of the years and the necessity to monitor long-term trends and impacts throughout the Nigerian economy.

Model Specification

The research paper discusses the effects of POS business operations, POS fraud, and inflation on the employment in Nigeria. The model can be put in functional form, which seems as:

$$EMP_t = f(POSB_t, POSF_t, INF_t)$$

Where:

- EMP_t = Employment Rate (dependent variable)
- $POSB_t$ = POS Business activities (e.g., number of POS terminals / volume of POS transactions)

- $POSF_t$ = POS Fraud cases
- INF_t = Inflation rate
- t = time (2013–2024)

The econometric model is written as:

$$EMP_t = \beta_0 + \beta_1 POSB_t + \beta_2 POSF_t + \beta_3 INF_t + \mu_t$$

Where:

- β_0 = intercept
- $\beta_1, \beta_2, \beta_3$ = coefficients showing the effect of each independent variable
- μ_t = error term capturing unobserved factors

Estimation of the model is done in both levels and not on the logarithmic form. This decision can be explained by the willingness to interpret the coefficients to determine the absolute changes in the values on the POS terminals and the values of fraud on the employment rate. Moreover, since the sample size is not that large and zero or negative values do not exist, the level specification offers a simple description of the linear association between the variables. However, conventional diagnostic tests have been applied to make sure that the estimates are credible.

RESULTS AND DISCUSSION

Table 1: Descriptive Statistics

	EMP	POSB	POSF	INF
Mean	50.61083	2664710	5.43E+08	16.54577
Median	48.2144	6496.347	2.42E+08	15.51274
Maximum	76.1	31841337	3.16E+09	33.88
Minimum	46.9932	2828.939	5851443	8
Std. Dev.	8.084783	9188260	8.6E+08	8.119467
Skewness	2.938681	3.015107	2.616568	0.958765
Kurtosis	9.812951	10.09088	8.619576	2.930165
Jarque-Bera	40.47984	43.32206	29.48267	1.8409
Probability	1.62E-09	3.92E-10	3.96E-07	0.39834
Sum	607.3299	31976526	6.52E+09	198.5493
Sum Sq. Dev.	719.0009	9.29E+14	8.13E+18	725.1832
Observations	12	12	12	12

Source: Author's Computation, (2025)

The descriptive statistics of Employment rate (EMP), POS Business (POSB), POS Fraud (POSF) and Inflation (INF) between 2013 and 2024 will give a clear image of the variables of interest. The median was 48.21 which is moderate and the average employment rate was 50.61 meaning that there was moderate employment in Nigeria within the period. In line with economic factors, expansion of POS business, fraud and incidence and other macroeconomic factors, employment rose to a maximum of 76.10 and a low of 46.99. The skewness of 2.94 is positive indicating that the level of employment was skewed to the right with extreme values in certain years whereas the Jarque-Bra statistic indicates that the data is not normally distributed.

The value of POS business was averaged at 2,664,710 with the lowest and highest values of 2,828 and 31,841,337 respectively, indicating that people quickly embraced POS terminals and services. Both the positive skewness (3.02) and the Kurtosis (10.09) are large thus showing the existence of extreme growth in the later years. Pos fraud had a mean of 543, 000, 000,000 with a minimum of 5, 851, 443 and a maximum of 3, 160,000,000,000 with high variability and extreme values in some years. The average inflation was 16.55, and it oscillated between 8% and 33.88 which is normally distributed and is suitable to be used as a control variable. The implication of these statistics is that POS business must have a positive effect on employment, POS fraud a negative effect on employment and the moderating effect of inflation.

Table 2: Correlation Matrix

	EMP	POSB	POSF	INF
EMP	1	0.992761	-0.02216	0.620708
POSB	0.992761	1	0.039863	0.672979
POSF	-0.02216	0.039863	1	0.138358
INF	0.620708	0.672979	0.138358	1

Source: Author's Computation, (2025)

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Regression Analysis

Dependent Variable: EMP

Method: Least Squares

Table 3: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	49.67921	0.669153	74.24192	0.0000
POSB	9.20E-07	3.66E-08	25.13087	0.0000
POSF	-5.02E-10	2.92E-10	-1.71727	0.1243
INF	-0.075431	0.041808	-1.80421	0.1088
R-squared	0.992460	Mean dependent var		5.06E+01
Adjusted R-squared	0.989832	S.D. dependent var		8.08E+00
S.E. of regression	0.823223	Akaike info criterion		2.710023
Sum squared resid	5.421572	Schwarz criterion		2.871658
Log likelihood	-12.2601	Hannan-Quinn criter.		2.65018
F-statistic	350.9828	Durbin-Watson stat		1.308406
Prob(F-statistic)	0.000000			

Source: Author's Computation, (2025)

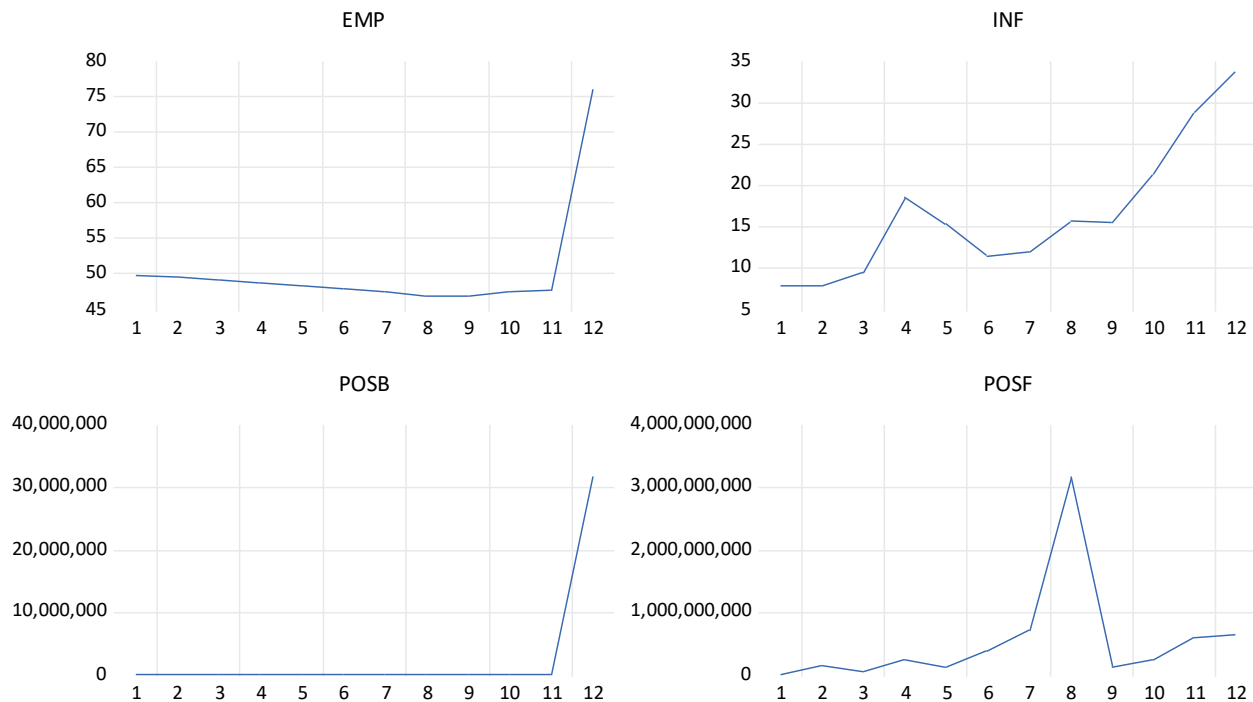
The regression analysis discusses the effect of POS Business (POSB), POS Fraud (POSF) and Inflation (INF) on Employment rate (EMP) in Nigeria between the years 2013 and 2024 in the Ordinary Least Squares. The fit of the model is quite good with R-squared of 0.992460 which implies that the independent variables explain about 99.25% of the change in employment. The fact that the F-statistic is 350.98 ($p = 0.0000$) is the result of the fact that the model is statistically significant as a whole, i.e., there is at least one variable that reliably predicted employment.

The intercept of 49.68 percent implies that without POS activities, fraud and inflation, the normal employment level stands at 49.68 percent. The coefficient of POS Business is favorable and of very high significance which is 0.00000092 ($p = 0.0000$) meaning that employment is increased strongly by growth in POS activities. The negative coefficient of POS Fraud is -0.000000000502, however, it is not significant ($p = 0.1243$) meaning that fraud has a minor impact on the employment, but the impact is not pronounced in this dataset. On the same note, Inflation has a coefficient of -0.075431 and the p-value is 0.1088 and its effect on the employment is insignificant.

The findings demonstrate that POS Business positively and significantly impacts employment, which implies that the expansion of the POS activities is one of the leading sources of job creation

in Nigeria. Conversely, the POS Fraud and Inflation have negative coefficients albeit with insignificance at normal levels. This implies that, their direct impacts on employment are not strong during the period under scrutiny and are not robust to make strong causal conclusions. Thus, although the sustainability of the jobs related to POS can be threatened by such factors as fraud and inflation, in this model, they have an indirect and secondary effect relative to primary role of POS business expansion.

Figure 1: Trend Analysis of Employment, POS Business, POS Fraud, and Inflation



Source: Author's Computation, (2025)

The line charts represent the tendencies of Employment rate (EMP), POS Business (POSB), POS Fraud (POSF), and Inflation (INF) in Nigeria in 2013-2024, revealing the dynamics of the digital financial innovations and macroeconomic variables over time.

Employment rate chart indicates that the employment rate was stable and very low between 2013-23 and ranged between about 47 and 50 per cent. There is however a sharp spike at 2024 where the figure is 76.1%, which shows a sudden rise in employment. This sharp increase can be explained by the blistering growth of POS business and more intensive use of digital financial services that provided major youths and small-scale entrepreneurs with significant employment opportunities.

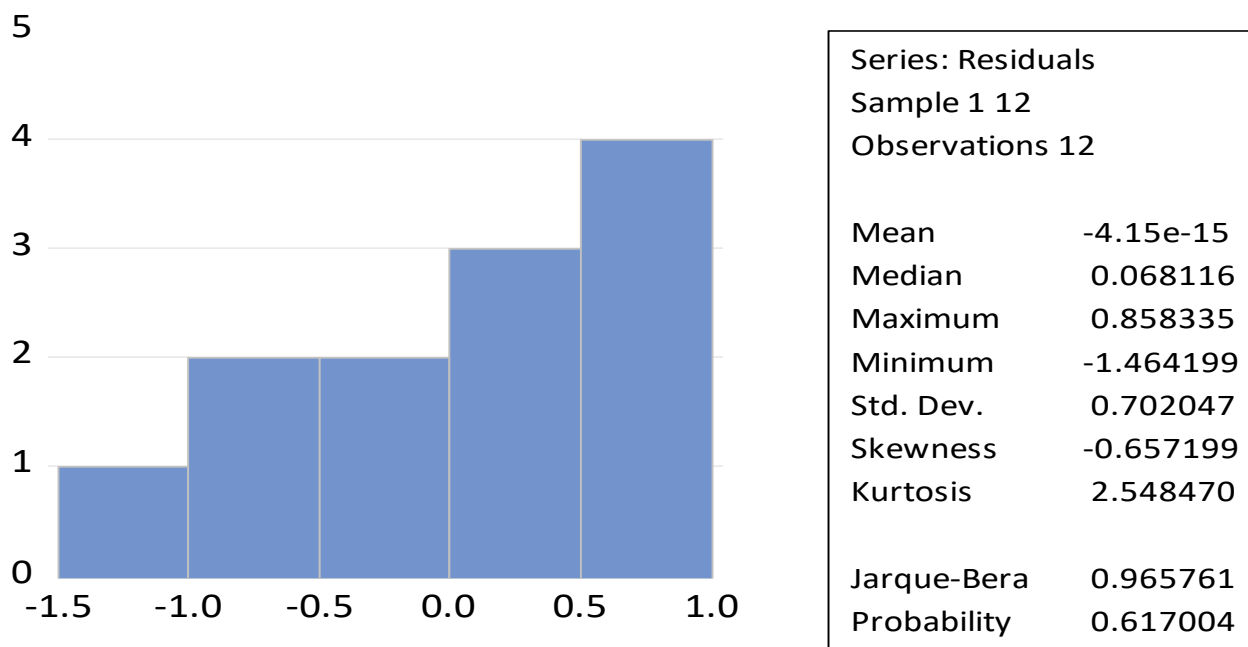
The POS Business did not expand much since 2013 to about 2017, but after that, the number is rising gradually, which is then exponentially growing in 2023-2024 to more than 31 million units. Such a trend indicates that the adoption of POS terminals and services in Nigeria has increased swiftly, which is correlated with the same development in employment, which proves that there is a positive relationship between the growth of POS and the growth of the labor market.

POS Fraud has low rates during the first years, and it has low fluctuations, but a significant peak occurs between 2020 and 2021, after which the trend decreases. This shows that with the growth of POS adoption, fraudulent activities went up but eventually stayed at the same levels, which represents the measures enacted against fraud and detection.

Figure 1 illustrates a slow upward trend of inflation during the period, with significant growth in 2016, 2017 and 2022-2024 with the highest inflation reaching 33.88 in 2024. The inflation also increases, but the employment rate is growing in 2024, which points to the fact that the negative impacts of inflation on the job creation might have been mitigated with the help of the POS business growth.

The trends show that business growth in POS is the major factor that boosts employment in Nigeria. Pos fraud, despite its increase at certain times, does not seem to have a major effect of reducing employment, whereas inflation has a secondary effect. The fact that EMP and POSB will be rising simultaneously in 2024 only highlights how digital financial innovations are transforming the Nigerian labor market.

Figure 2: Normality Test of Residuals



Source: Author's Computation, (2025)

The histogram and the statistical summary of the results use the normality test of the residuals obtained under the regression model that analyzed Employment Rate as a regression of POS Business, POS Fraud and Inflation in Nigeria. This test is aimed at checking whether the residuals have a normal distribution, which is a significant assumption of the regular least squares estimation. The histogram of the residuals appears to be rather symmetric with most of the values being concentrated between negative 0.5 to positive 1.0. Despite some noticeable deviations of perfect symmetry, there are no indications of extreme outliers and skewness have been observed in the shape.

This observation can be supported using the descriptive statistics. The average of the residuals is more or less zero, as it is expected of a well-fitted regression model. The proximity of the residuals to the central point is also supported by the fact that the median equals 0.068. The skewness value of -0.657 is an indication of slight left-leaning distribution and this degree of skewness is not so high to warrant breach of normality. The value of kurtosis is 2.548, indicating that the distribution is a bit less steep than the normal distribution but is still within the reasonable range. The most important indicator is the Jarque-Bra statistic of 0.965 with the probability value of 0.617. The null hypothesis of normality cannot be rejected because the probability is more than the level of 0.05 significance. This implies that the residues follow a normal distribution. Finally, the test of the normality of the residue values shows that the regression model is normative that supports the reliability and validity of the estimated coefficients and the model results in general.

Discussion of Findings

The paper has investigated how POS Business, POS Fraud and Inflation affect Employment rate in Nigeria in 2013-2024. The regression findings showed that the impact of POS Business on employment is positive and highly significant. The given finding is similar to the research of Augustine et al. (2023), Nwangwu (2024), and Adewole, Attah, Adewale, and Idih (2022) who found out that the growth of POS terminals and mobile POS operations could greatly contribute to the development of small-scale business, decreased youth unemployment, and opened income-generating possibilities. In the same vein, Nuel-Okoli, Ezeife, and Adani (2025) noted that the POS operations led to job creation among small scale businesses with a significant and positive influence, which is in line with the assertion that digital financial innovations are important in promoting labor absorption in urban Nigeria.

Although negatively related to employment in this paper, POS Fraud was not significant statistically. This partially agrees with Ibekwe (2021), Imade and Evbayiro-Osagie (2025), who pointed to the growing operational risks and financial losses in banking and digital financial services due to electronic fraud such as POS fraud. Nevertheless, the lack of significance in this research paper implies that the beneficial effects of POS Business could counterbalance the disruptive nature of fraud on the employment, which earlier research did not aggressively examine but focused more on financial metrics instead of employment results.

Even though, POS Fraud and Inflation show negative indicators, their impact is not statistically relevant in this case. This means that they have a poor or indirect impact on employment in the period, and could be dwarfed by the ambitious growth of POS business operations. Therefore, the results are that although these aspects are still significant in terms of policy, they do not have a significant quantifiable effect on employment outcomes during the sample period. The irrelevant coefficient in the case of POS operations implies that as much as inflation is expected to raise the cost of operations, the growing pace of POS activities can compensate its possible negative impact on the employment.

On the whole, the results prove that POS Business is the main impetus of job creation in Nigeria, and the impact of fraud and inflation is weak or indirect. The findings affirm the need to encourage the use of POS, support the proper infrastructure and enact regulations to improve employment rates and control risks related to fraud and inflation.

CONCLUSION

This paper has analyzed the effects of POS Business, POS Fraud and Inflation on the Employment rate in Nigeria in 2013 and 2024. The results show that there exists a strong and positive influence by the POS Business on employment and therefore this proves that the growth of the POS terminals and higher volumes of transactions do generate employment, especially among young people and small-scale businesspersons. The POS Fraud was identified to have a negative though not significant impact on employment, which implies that although POS Fraud can be dangerous, its influence is now somewhat neutralized by the development of POS business. There was also a negative yet non-significant association of inflation and employment meaning that a rise in prices will reduce employment opportunities by a small margin but the rapid growth of POS businesses nullifies this aspect. In summary, this research will prove that POS Business is the primary cause of employment in Nigeria. On the other hand, POS Fraud and Inflation show negative but statistically insignificant coefficients with employment, which means that the impact of these two is weak and indirect during the period under analysis, and not that of strong determinants of employment.

The government must facilitate the growth of POS businesses by offering incentives, grants or tax exemption to small entrepreneurs and youths involved in running POS kiosk. Moreover, the implementation of the policies that would enhance financial inclusion and provide secure environments to POS operators in cities and regions would also improve the employment and make the sector sustainable.

CBN ought to facilitate implementation of POS systems and invest in infrastructure development, especially in underserved areas in order to create more job opportunities. Strong fraud prevention laws should also be put in place, POS activities should be closely monitored, and macroeconomic laws that regulate inflation should also be enforced hence ensuring that the operating costs of POS businesses remain low.

To enhance effectiveness of operations and awareness of fraud prevention measures, banks are supposed to give training programs to the POS operators. Providing quality POS terminals and sound network infrastructure as well as educating the customers about safe transactions will develop a level of trust and reduce operational risk. The timely implementation of fraudulent practices and identification are necessary to protect operators and customers.

To avoid fraud, POS operators are advised to embrace the best practices which include; the proper management of PIN, making sure that the transactions are done safely and also reporting of suspicious transactions on time. It is important to keep record of the transactions and adhere to the regulations established by the banks and the CBN. Operators are recommended to expand their businesses at a particular rate between expansion and operations security to maintain the position of creating employment.

REFERENCES

Adewale, A. A., & Adeyemo, A. A. (2024). Effect of unemployment and inflation on Nigerian economic growth: a time-series analysis. *The Journal of VN Karazin Kharkiv National University. Series: International Relations. Economics. Country Studies. Tourism*, (19), 47-56. <https://doi.org/10.26565/2310-9513-2024-19-05>

- Adewale, A. A., (2024). The Impact of Electronic Banking Channels on The Financial Inclusion in Nigeria. *Gomal University Journal of Research*, 40(4), 426-441. <https://doi.org/10.51380/gujr-40-04-03>
- Adewale, A.A. (2025). Effects Of Budget Deficit and Money Supply on Inflation in Nigeria. *Business Excellence & Management*, 15(3), 21-39. <https://doi.org/10.24818/beman/2025.15.3-02>
- Adewole, J. A., Attah, E. V., Adewale, A. A., & Idih, O. E. (2022). Effect Of Point of Sale (Pos) Business on Employment Generation in Nigeria. *Unizik Journal of Entrepreneurship (ENTREP)*, 3(2), 145-156 <https://unizikentrepjournal.com.ng/index/index.php/Journal/article/view/75>
- Atanasov, Y. (2022). ERP systems in retail sales management in inflation conditions. *Известия На Съюза На Учените-Варна. Серия Икономически Науки*, 11(2), 114-123.
- Augustine, O. O., Jonah, O., Chinedu, E. C., Victor, N. A., & Onuabuchi, N. E. (2023). Point of Sale (POS) and Job Creation in Enugu State, Nigeria: A Study of Nsukka Urban, 2012-2021. *Central Asian Journal of Social Sciences and History*, 4(9), 172-192
- Gloria, E. (2022). Impact of POS business in reducing unemployment rate in Anambra State. *International Academic Journal of Management & Marketing*.
- Ibekwe, A. O. (2021). Financial innovation and performance of deposit money banks in Nigeria. *International Journal of Business & Law Research*, 9(1), 162-173.
- Imade, O. O., & Evbayiro-Osagie, E. I. (2025). The Impact of Electronic Banking Services on Fraud Incidence in Nigerian Deposit Money Banks:: An Empirical Analysis. *International Journal of Finance, Accounting And Management Studies*, 1(9), 27-42.
- Karpoff, J. M. (2021). The future of financial fraud. *Journal of Corporate Finance*, 66, 101694.
- Nuel-Okoli, C. M., Ezeife, A. O., & Adani, N. I. (2025). Exploring Small Scale Businesses Influence On Employment Creation In Nigeria. *Multidisciplinary Journal Of Management And Social Sciences*, 2(2).
- Nwangwu, C. J. (2024). Point of Sales (Pos) Business and Unemployment Reduction in Awka, Anambra State. *Journal Of Emerging Trends In Management Sciences and Entrepreneurship*, 6(1), 129-146.
- Obi, E. N. (2023). Impact of criminal acts on point of sales (pos) business operations in Karu local government area of Nasarawa state. *NIU Journal of Social Sciences*, 9(2), 119-127.
- Osifodunrin, E. A., & Lopes, J. D. (2025). Assessing the Willingness to Pay for Micro Cyber-Risk Insurance Among Branchless Banking Agents in Urban Slums. *The Journal of Developing Areas*, 59(4), 97-120.
- Phillips, A. W. (1962). Employment, inflation and growth. *Economica*, 1-16.
- Seyoum, B. (2024). Entrepreneurship, Domestic Investment, and Services. In *State Fragility, Business, and Economic Performance: An Ethiopian Perspective* (pp. 225-274). Cham: Springer International Publishing.
- Sylvanus, E., & Bupo, G. O. (2024). Exploring Cyberattacks on Point-Of-Sale Operators in Port Harcourt Metropolis. *Journal of Business and Entrepreneurship Education*, 3(1), 1-11.
- Bahria University Journal of Management and Technology*.2026, Volume 9, Issue 1