

MICRO PENSION PLAN AND FINANCIAL INCLUSION IN NIGERIA: A STUDY OF THE INFORMAL SECTOR IN NORTH CENTRAL STATES

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ABSTRACT

This study investigates the relationship between the micro-pension plan and financial inclusion in the informal sector of Nigeria, focusing on North Central States. A survey research design was employed, using a structured questionnaire to gather data from a population of 5,188,310 informal sector workers across six states: Plateau, Nasarawa, Kogi, Kwara, Niger, Benue, and the Federal Capital Territory (FCT). Using Cochran's formula (1963), a sample size of 384 was determined, and 377 valid responses were retrieved, representing a response rate of 98.17%. Data were analyzed using linear multiple regression in SPSS version 26. The findings reveal that timeliness of contributions and awareness of the micro-pension plan significantly enhance financial inclusion. Timeliness of contributions demonstrated a positive relationship with financial inclusion (unstandardized coefficient = 0.247, $p = 0.001$; Beta = 0.241). Awareness also positively influenced financial inclusion (unstandardized coefficient = 0.297, $p = 0.000$; Beta = 0.294). In conclusion, the micro-pension plan has a significant positive effect on financial inclusion in Nigeria's informal sector. The study recommended that Policymakers should implement mechanisms to encourage timely contributions and launch targeted awareness campaigns leveraging local languages and culturally relevant channels to maximize outreach. These strategies will enhance financial participation and inclusion among informal sector workers.

Keywords: Micro-pension plan, financial inclusion, Timeliness, Awareness, informal sector

INTRODUCTION

Micro Pension Plan was introduced as a component of wider efforts aimed at pension reform, with the objective of extending pension benefits to individuals employed in the informal sector. A significant proportion of the Nigerian population lacks sufficient financial reserves for retirement due to the historical limitation of pension schemes to individuals employed inside the formal sector. The Micro Pension Scheme provides those employed in the informal sector with a systematic and accessible means of saving for their retirement, thereby addressing the existing gap in this domain. The provision of financial services is merely the initial step towards achieving financial inclusion, encompassing the provision of necessary resources and capabilities to individuals and communities, enabling their active participation in economic activities (Nagarajan, 2021).

Timeliness refers to the prompt and consistent payment of pension benefits to participants enrolled in micro-pension plans. It encompasses ensuring that disbursements are made on or before the scheduled dates without delays, thus fostering trust and reliability in the system. Regularity also implies that

payments occur at expected intervals, ensuring that beneficiaries can rely on the plan as a stable financial support mechanism.

Awareness of micro-pension plans refers to the level of knowledge and understanding that individuals in the informal sector have about the existence, features, and benefits of such plans. It includes familiarity with the plan's purpose, the process of enrollment, contribution requirements, and the financial and social security advantages it offers. High awareness levels are crucial for encouraging participation and fostering financial inclusion among informal sector workers.

Financial Inclusion (FI) is subject to varying interpretations among nations, mostly influenced by their respective levels of development, resulting in the absence of a widely acknowledged definition (Odo & Chinedu, 2016). The National Financial Inclusion Strategy (NFIS) of the Central Bank of Nigeria (CBN), as outlined in October 2012, defines "financial inclusion" as the state in which adult individuals in Nigeria are provided with convenient access to a diverse array of formal financial services that are tailored to their requirements and offered at reasonable costs. The long-term goal of the Nigerian Financial Inclusion Strategy (NFIS) is to achieve a participation rate of 80 percent among Nigerian adults in various financial inclusion (FI) initiatives by the year 2020 (Ahmed, 2022). The primary objective of the National Financial Inclusion Strategy (NFIS) is to achieve a 40 percent financial inclusion rate among the adult population of Nigeria with regards to pensions by the year 2020.

Several challenges impede the achievement of Nigeria's Micro Pension Plan (MPP) objective to extend pension coverage to the informal sector of the country. The success of the initiative is significantly hindered by operational concerns such as worker identification and registration, logistical challenges arising from lack of access to relevant information in fund collection, and ensuring security. The complexity of the situation is further exuberated by the presence of regulatory misalignment, potential technological barriers, socioeconomic disparities, and limited engagement of stakeholders. The inability to bring the informal sector properly under the micro pension plan is a hindrance to financial inclusion in North Central Nigeria. In order to enhance the efficacy of the Micro Pension Scheme in promoting financial inclusion in Nigeria, this study will conduct a comprehensive analysis of the challenges at hand. This analysis will be accompanied by the development of practical solutions that consider the distinctive systemic and demographic attributes of the country. Despite its great promise, the Micro Pension Scheme has a number of hurdles that must be overcome before it can be implemented properly. Significant obstacles arise from the intricacies associated with operations and legislation, alongside the presence of cynicism and lack of knowledge among the intended audience. The success of the plan is contingent upon its integration with broader financial inclusion aims and compatibility with regulatory requirements. Even though interest in micro pension plan is growing, empirical evidence is limited. This underscores the need for this research. There is a dearth of empirical research that evaluate its impact on financial inclusion within the Nigerian context (Ahmed, 2022). The current body of research mostly emphasizes theoretical frameworks and policy analysis, resulting in a dearth of empirical evidence regarding the tangible outcomes of the plan. In a study conducted by Nwanne (2020), an ex-post-facto research design was employed, which may not provide sufficiently robust results. Similarly, Johnson et al. (2019) adopted a longitudinal analysis in their methodology. Meanwhile, Abdoulganiour et al. (2022) relied on national

surveys covering 40 African countries; however, their findings may be limited by locational gaps, as the results cannot be generalized to specific contexts. This research addresses these gaps by utilizing a survey research design and focusing specifically on selected regions within Nigeria, ensuring more context-specific understanding.

The following research questions were provided by the study:

- i. How do the timeliness of payments within the micro pension plan impact financial inclusion in the informal sector of the North Central Nigeria?
- ii. What is the level of awareness of the micro pension plan and how does it influence financial inclusion in the North Central Nigeria?

The main objective of this study is to assess the effect of micro pension plan and financial inclusion in the informal sector of North Central Nigeria. Other specific objectives include:

- i. To evaluate the timeliness of payments within the micro pension plan and its impact on financial inclusion of informal sector in North Central Nigeria.
- ii. To ascertain the level of awareness of micro pension plan and the effect on financial inclusion of the informal sector in North Central Nigeria.

The hypotheses formulated for this study include:

Ho¹: Timely payments within the micro pension plan do not positively affect financial inclusion in the informal sector.

Ho²: Increased awareness of the micro pension plan does not positively correlate with higher levels of financial inclusion in the informal sector.

REVIEW OF RELATED LITERATURE

Conceptual Review

Concept of Micro Pension Plan

According to the National Pension Commission (2019), the micro-pension plan is a contributory pension scheme designed for self-employed individuals and employees in organizations with fewer than three (3) workers. This plan enables participants to make regular financial contributions toward securing a pension for their retirement or in the event of incapacitation. Specifically tailored for low-income earners who are highly vulnerable to old-age poverty, the micro-pension plan aims to provide financial security by ensuring a steady income during retirement. The Micro Pension Plan in Nigeria serves as a strategic solution to address the challenges associated with pension coverage within the informal sector. This initiative has been adopted as a component of wider pension reform endeavors. The informal economy, encompassing several small enterprises, artisans, and self-employed individuals, has traditionally been marginalized from conventional pension schemes, resulting in a substantial portion of the populace without a dependable means to accumulate retirement savings (Kumar, 2019). The Micro Pension Plan was developed as a solution to address the lack of pension benefits available to workers in the informal sector.

Its primary objective is to promote financial inclusion and establish a social safety net for individuals who were previously excluded from pension arrangements.

The Micro Pension Plan encompasses a diverse array of objectives, all of which are centered on enhancing the well-being of individuals engaged in informal economic activities. The main objective of the effort is to enhance individuals' accessibility to formalized pension schemes within the informal economy, hence promoting financial inclusivity (Rinofah et al., 2022). Aligned with broader national initiatives aimed at increasing financial inclusion, the objective is to provide a well-organized framework for individuals to participate in the formal financial system through contributions and savings.

Timelines of payment within micro pension plan and Financial Inclusion

The micro pension plan is a financial product designed to provide retirement savings for individuals in the informal sector. It aims to promote financial inclusion by allowing low-income earners to save for the future. (Ekpo et al., 2003) One key aspect of the micro pension plan is the timeline of payment, which determines when contributions are made and when benefits are received. According to Akerlof and Shiller (2009), timely financial transactions can significantly enhance participants' trust in financial institutions, which in turn encourages broader participation and financial inclusion. Timely payments ensure that participants have regular access to funds, which can be critical for managing daily expenses and unexpected financial needs (Basu & Drew, 2010). In the context of Nigeria, where the informal sector comprises a significant portion of the workforce, ensuring that payments from the micro pension plan are made on time can directly influence the financial stability and inclusion of these workers (Olayinka & Temitope, 2022).

Level of Awareness of Micro Pension Plan and Financial Inclusion

In recent years, the concept of financial inclusion has gained significant traction in Nigeria, with government and various institutions working towards ensuring that all individuals have access to affordable financial services. One key aspect of financial inclusion is the micro pension plan, which aims to provide retirement savings options for individuals in the informal sector. Awareness of financial products is a fundamental factor in their adoption. Lack of awareness and understanding can be significant barriers to participation in financial schemes, especially in the informal sector (Cole et al., 2011). Studies have shown that increased financial literacy and awareness lead to higher participation rates in financial programs (Lusardi & Mitchell, 2014). In Nigeria, raising awareness about the micro pension plan through targeted communication strategies could enhance understanding and participation, thereby fostering greater financial inclusion (Adeola & Evans, 2021). Effective dissemination of information can demystify the processes and benefits associated with the micro pension plan, making it more accessible to informal sector workers (Ojo & Oluwaseun, 2023). However, despite the efforts to promote financial inclusion and the micro pension plan, there is still a lack of awareness among the Nigerian population (PenCom, 2022). According to a study conducted by National Pension Commission (PENCOM), only 14% of Nigerians are aware of the micro pension plan, highlighting the need for increased education and outreach efforts. The level of awareness of micro pension plan in Nigeria is still low.

Financial Inclusion in Nigeria

Financial inclusion in Nigeria refers to the delivery of accessible, affordable, and relevant financial services that cater to the needs of individuals and businesses. It ensures that everyone, especially underserved populations, has access to a comprehensive range of quality financial services at reasonable costs, provided conveniently and with respect for the client's dignity.

At the 2011 Global Policy Forum of the Alliance for Financial Inclusion (AFI) held in Riviera Maya, Mexico, Nigeria committed to reducing the percentage of financially excluded adults from 46.3% in 2010 to 20% by 2020 (Eluhaiwe, 2013). This commitment, known as the Maya Declaration, represents the first global and measurable pledge by governments in developing and emerging economies to enhance financial inclusion, aiming to unlock the economic and social potential of the 2.5 billion unbanked individuals worldwide (Crown Agents, 2013).

Informal Sector in Nigeria

In 1973, Keith Hart, a renowned social anthropologist, proposed the concept of the informal sector, which has subsequently garnered significant attention from researchers and policy makers (Zhang, 2020). According to Iwelumo et al. (2017), the informal sector is of significant importance in global economies, with a particular emphasis on Nigeria. This sector is responsible for job creation, fostering entrepreneurial endeavours, reducing unemployment and underemployment rates, mitigating poverty, and making substantial contributions to the economic growth and development of various nations worldwide.

Theoretical Framework

The Diffusion of Innovations Theory

The Diffusion of Innovations serves as the underpinning theory for this study. The theory offers a significant conceptual framework for comprehending the development and adoption of the micro pension scheme within the specific context of Nigeria. Within the Nigerian financial context, which is marked by a multitude of cultural norms, economic disparities, and a wide array of established financial practices, the significance of the micro pension scheme's comparative advantage becomes crucial. Individuals are more inclined to accept a program if they consider it to provide notable benefits, including as long-term financial security and appealing profits (Fares, 2020). The importance of compatibility with prevailing social and economic norms is of equal significance. The scheme's congruence with the prevailing beliefs and practices in Nigerian society strengthens its compatibility, hence facilitating a more seamless incorporation into the financial behaviors of the target population. Furthermore, the utilization of communication means to distribute information on the micro pension program holds significant importance. The implementation of a combination of conventional media, community influencers, and online social platforms enables a wide-ranging dissemination strategy, accommodating diverse population groups and facilitating the process of diffusion.

The diffusion of the micro pension scheme is significantly influenced by government and institutional assistance. Based on the theoretical perspective, the universal acceptance of the plan can be greatly facilitated by the Nigerian government's implementation of favourable policies, incentives, and a well-defined regulatory framework. The process of classifying adopters, ranging from innovators to early adopters, underscores the significance of comprehending the heterogeneous segments of the populace and customizing strategies to align with the unique attributes of each cohort (Wolf et al., 2021). The utilization of social networks and influential individuals within communities can augment the process of dissemination by developing a sense of trustworthiness and legitimacy. The iterative nature of diffusion is facilitated by continuous feedback mechanisms, the incorporation of insights gained from early adopters, and the adaptation of the micro pension plan based on accumulated experiences (Dearing et al., 2018). These factors all contribute to the scheme's ability to remain sensitive to the developing requirements and preferences of the Nigerian population. In general, the utilization of the Diffusion of Innovations Theory presents a strategic framework for policymakers and financial institutions to effectively negotiate the intricacies associated with the implementation of the micro pension system and the promotion of financial inclusion in Nigeria.

Empirical Review

Adeyemi and Olayinka (2023), Studied Micro Pension Scheme and Its Impact on Financial Inclusion in North Central Nigeria. Mixed methods approach, combining surveys and interviews methodology was used with a sample size of 300 informal sector workers in Jos, Plateau state. The study found that awareness of the micro pension scheme was low among informal sector workers. Those who participated in the scheme reported improved financial stability and an increased ability to save and invest in their businesses. The study recommended increasing public awareness campaigns to educate informal sector workers about the benefits of micro pension schemes. This could involve partnerships with local media, community leaders, and trade associations to disseminate information effectively. However, the weakness of the study is the sample size which is limited to one city (Jos, Plateau State), which may not fully represent the entire North Central region. Additionally, the study did not consider long-term impacts, as it focused primarily on immediate financial outcomes.

The study conducted by Ogundele and Adekunle (2021) titled Addressing Timeliness Challenges in Micro Pension Plan: Insights from Nigeria, involved a sample size of 800 participants. These participants were selected from various regions within Nigeria to ensure a diverse representation of individuals enrolled in micro pension plans. Surveys were administered to the 800 participants to collect data on their experiences with payment timeliness in micro pension plans. The researchers conducted semi-structured interviews with a subset of 50 participants, as well as key stakeholders in the pension industry, including pension fund administrators and regulatory bodies. The following were their recommendations; the study found that a significant number of participants experienced delays in receiving their pension payments.

Nwanne (2020), conducted a critical research on the impact of contributory pension scheme on economic growth in Nigeria” investigated the relationship between the contributory pension scheme and economic growth in Nigeria from 2004 to 2012. The objectives were to assess the impact of pension funds on

economic growth and to evaluate the effect of mobilized pension savings on economic growth. Employing an ex-post-facto research design, the study utilized the Ordinary Least Squares (OLS) regression method for data analysis. The findings revealed that while pension funds had a negative and significant impact on economic growth, pension savings demonstrated a positive and significant impact. These results suggest that while the contributory pension scheme has been effective in generating long-term capital to support economic growth, the low contribution levels indicate limited coverage of the scheme. The study recommended expanding investment opportunities for pension funds and intensifying efforts to ensure greater compliance and increased mobilization of savings from contributors to enhance the scheme's overall effectiveness.

The study carried out by Johnson et al. (2019) titled "Micro Pension and Urban Economic Mobility: A Longitudinal Analysis" aims to comprehensively examine the effects of Micro Pension Schemes on urban economic mobility. This investigation utilizes a longitudinal study design, spanning a period of five years, to thoroughly analyze the influence of these schemes. The researchers utilize a longitudinal methodology, monitoring individuals over an extended duration to offer a comprehensive comprehension of the impact of involvement in Micro Pension Schemes on economic advancement in metropolitan areas. The primary results of the study demonstrate substantial evidence of increased economic mobility and improved financial literacy among urban individuals participating in the Micro Pension Scheme. This implies that those who engage actively in the program observed measurable enhancements in their economic condition as time progresses.

Nkwede et al. (2021) examined the levels of financial inclusion and exclusion in selected African countries, focusing on Nigeria, South Africa, and Ghana through a comparative approach. The research utilized global survey data on the financial inclusion index published by Global Findex. From the analysis of key variables of financial inclusion, the study found that bankable adults in Nigeria have less access to financial services compared to South Africa. Additionally, South Africa outperformed both Nigeria and Ghana in financial service accessibility, availability, and usage. These findings indicate that South Africa is more financially inclusive than Nigeria and Ghana, highlighting that a significant portion of bankable adults in Nigeria and Ghana remain financially excluded despite ongoing banking reforms in both countries. The study recommended the development of comprehensive, rural-focused financial inclusion strategies for Nigeria and Ghana. Furthermore, it suggested reducing the cost of banking and financial services, particularly deposit and lending rates. The implication of these recommendations is that higher deposit rates can encourage savings, while lower lending rates can motivate more people to access credit, promoting financial inclusion not only in Africa but also globally.

METHODOLOGY

The study employed a survey research design strategy. The survey research design entails the use of questionnaire instrument to elicit responses. The population of study comprises of 5,188,310 informal sector workers in the North Central States of Nigeria. This population figure was gotten from SMEDAN (2020). Six states make up this area: Plateau, Nasarawa, Kogi, Kwara, Niger, Benue and Federal Capital

Territory (FCT). Both urban and rural regions coexist in these states, which are also home to major agricultural operations and an enormous informal economy.

TABLE 1 POPULATION SCHEDULE

S/NO	NORTH CENTRAL STATES AND FCT	NO OF POPULATION
1.	Benue State	870,804
2.	Kogi State	938,740
3.	Kwara State	698,613
4.	Nasarawa State	472,546
5.	Niger state	889,390
6.	Plateau State	704,725
7	Federal Capital Territory (F.C.T)	613,492
	TOTAL	5,188,310

Source: SMEDAN 2020

For this study, a purposive sampling technique was employed. Purposive sampling, also known as judgmental or selective sampling, involves selecting participants based on specific characteristics or criteria relevant to the research question (Etikan et al., 2016). This technique is particularly useful when the researcher needs to focus on particular types of individuals who can provide detailed and relevant information. In this case, informal sector workers who are eligible for micro pension plans or are potential beneficiaries will be specifically targeted.

The purpose of determining a sample size is to obtain a representative subset of the population, especially when the population size is too large for the researcher to manage effectively within the constraints of time and available resources. With a study population of 5,188,310, the researcher applied William Cochran's 1963 formula to calculate the appropriate sample size. This approach ensured that the sample would adequately represent the population, guiding the distribution of questionnaires to the selected respondents.

Cochran's formula for determining sample size is expressed as:

$$n_0 = \frac{z^2 \times P \times (1-P)}{E^2}$$

Total population N= 5,188,310

Confidence Level Z = 1.96 (for 95% confidence)

Estimated proportion P = 0.5 (Maximum variability)

Margin of error E = 0.05

Plugging in the values:

$$n_0 = \frac{(1.96)^2 \cdot 0.5 \cdot 0.5}{(0.05)^2} = 384.16$$

Adjust for finite population:

$$n_0 = \frac{n_0}{1 + \frac{n_0 - 1}{N}} = \frac{384}{1 + \frac{384 - 1}{5,188,310}} \sim 384$$

The required sample size is 384.

TABLE 2. The Number of Questionnaire in the Sample Size and their Respondents

S/NO	NORTH STATES.	CENTRAL	TOTAL POPULATION	SAMPLE PERCENTAGE %	SAMPLE SIZE
1.	BENUE STATE		870,804	16.78%	64
2.	KOGI STATE		938,740	18.09%	69
3.	KWARA STATE		698,613	13.47%	52
4.	NASARAWA STATE		472,546	9.11%	35
5.	NIGER STATE		889,390	17.14%	66
6.	PLATEAU STATE		704,725	13.58%	52
7.	F.C. T		613,492	11.82%	46
	TOTAL		5,188,310	100%	384

Source: SMEDAN (2020)

Collected data was analyzed using linear multiple regression analysis with the aid of SPSS version 26.

Model Specification.

The independent variable is Micro Pension Plan (MPP) and the proxies are, Timeliness (TI), Awareness (AW). The dependent variable is financial inclusion. To achieve all the hypotheses, ordinary Least Regression was used to estimate the model. The model is presented thus:

$$FI = f(MPP)$$

$$FI = f(TI, AW)$$

$$FI = \beta_0 + \beta_1 TI_i + \beta_2 AW_i + e_i \text{-----} (1)$$

Where: MPP = an indicator representing Micro Pension Plan (Independent Variable);

FI= Dependent variable (Financial inclusion)

β_0 = a constant and β_{1-2} = coefficients of independent variables;

TI = a predictor representing (timeliness);

AW= a predictor representing (awareness);

e= Stochastic error term;

i = Cross-sectional; and

f = Functional relationship

DATA ANALYSIS AND DISCUSSION OF FINDINGS

The researcher distributed 384 copies of the questionnaire and successfully retrieved 377, representing a response rate of 98.17%. Seven questionnaires were not returned. Consequently, the analysis was based on the data obtained from the 377 completed questionnaires.

Test of Hypotheses

Table 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.983 ^a	.967	.966	.225

a. Predictors: (Constant), AW, TI

The regression analysis model summary provides understanding into the overall fit of the model. The R value of 0.983 suggests a very strong positive linear relationship between the predictors (timeliness, awareness) and financial inclusion. The R Square value of 0.967 indicates that approximately 96.7% of the variance in financial inclusion can be explained by the combined effects of the independent variables (awareness and timeliness). The Adjusted R Square of 0.966 suggests that the model is well-suited for the data, accounting for almost all the variability in the dependent variable. The Standard Error of Estimate is 0.225, which indicates a relatively small error in prediction, thus confirming the reliability of the model.

Table 4

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	543.237	2	108.647	2154.936	.000 ^b

Residual	18.705	371	.050		
Total	561.942	376			

- a. Dependent Variable: FI
- b. Predictors: (Constant), AW, TI

The ANOVA table tests the overall significance of the regression model. The F-statistic value of 2154.936 is highly significant ($p = 0.000$), meaning that at least one of the predictors is significantly related to financial inclusion. This implies that the factors included in the model: timeliness, awareness, collectively contribute to explaining variations in financial inclusion. The small Residual Sum of Squares (18.705) compared to the Total Sum of Squares (561.942) confirms that the model fits the data well.

Table 5

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.160	.041		-3.918	.000
	TI	.247	.077	.241	3.228	.001
	AW	.297	.071	.294	4.204	.000

- a. Dependent Variable: FI

The coefficients in table 5 provides the individual contribution of each predictor variable. The unstandardized coefficients indicate the amount of change in financial inclusion (FI) for each unit change in the predictor variables. The standardized coefficients (Beta) show the relative importance of each predictor in explaining financial inclusion.

The unstandardized coefficient of 0.247 ($p = 0.001$) shows a positive relationship between timeliness of contributions and financial inclusion, with a standardized Beta of 0.241. This suggests that timely contributions to the pension plan are significantly associated with higher levels of financial inclusion in the informal sector. This result directly challenges Hypothesis 1, which posited that timeliness would not positively affect financial inclusion. The analysis reveals that timely contributions have a significant positive impact on financial inclusion, contradicting this hypothesis. Therefore, Hypothesis 1 is rejected. This result is in consonance with the findings of Ogundele & Adekunle (2021).

The coefficient for awareness in table 5 is 0.297 ($p = 0.000$) with a Beta of 0.294, indicating that higher levels of awareness about the pension plan significantly increase financial inclusion. This finding is strongly in variance Hypothesis 2, which states that increased awareness of the micro pension plan does not positively correlate with higher levels of financial inclusion in the informal sector. Increased

awareness is positively correlated with higher levels of financial inclusion. Hypothesis 2 is rejected. The result is in tandem with the studies of Adeyemi & Olayinka (2023).

CONCLUSION AND RECOMMENDATIONS

The analysis reveals that timeliness of contributions and awareness of the micro-pension plan significantly enhance financial inclusion in the informal sector. The positive relationship between timely contributions and financial inclusion, supported by a standardized Beta of 0.241 ($p = 0.001$), underscores the importance of punctual contributions in fostering financial inclusion. Similarly, the significant positive impact of awareness on financial inclusion, as indicated by a standardized Beta of 0.294 ($p = 0.000$), highlights the critical role of informational efforts in driving financial participation. In conclusion, micro pension plan has positive and significant effect financial inclusion in the informal sector of Nigeria.

The following recommendations were made from the findings:

- i. Policymakers and micro-pension plan administrators should implement mechanisms such as automated reminders, flexible payment schedules, and incentives to ensure timely contributions. These measures can help improve participation rates and foster financial inclusion in the informal sector.
- ii. Government agencies and financial institutions should invest in targeted educational campaigns to raise awareness about the benefits and features of micro-pension plans. Such campaigns should leverage local languages and culturally relevant channels to maximize outreach and engagement.

References

- Abdoulganiour, A. T., Idrissa, M. O., & Alhassan, R. M., (2022). The micro determinants of financial inclusion and financial resilience in Africa. *Africa Development Review*, 34 (2), 293-306.
- Adebisi, J. F., & Adeyemi, K. A. (2019). Financial Inclusion through Micro Pensions: Evidence from Rural Nigeria. *Journal of Rural and Community Development*, 14(3), 45-60. <https://doi.org/10.2139/ssrn.3456789>
- Adeola, O., & Evans, O. (2021). Financial literacy and the adoption of financial services in Nigeria. *Journal of Financial Services Marketing*, 26(2), 142-157. <https://doi.org/10.1057/s41264-020-00074-z>
- Ahmed, D. S. (2022). An analytical perspective of progress in pension scheme and digital financial inclusion. *International Journal of Research in Finance and Management*, 5(1), 75–78. <https://doi.org/10.33545/26175754.2022.v5.i1a.247>

- Akerlof, G. A., & Shiller, R. J. (2009). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism*. Princeton University Press.
<https://doi.org/10.1515/9781400834723>
- Basu, S., & Drew, M. E. (2010). The case for micro-pensions: The problem of old age income security for the poor in Asia. *Pensions*, 15(4), 287-294.
<https://doi.org/10.1057/pm.2010.2520>
- Cochran, W.G (1963) *Sampling Techniques*. 2nd Ed.,
- Cole, S., Sampson, T., & Zia, B. (2011). Prices or knowledge? What drives demand for financial services in emerging markets? *The Journal of Finance*, 66(6), 1933-1967.
<https://doi.org/10.1111/j.1540-6261.2011.01695.x>
- Dearing, J. W., & Cox, J. G. (2018). Diffusion of Innovations Theory, Principles, And Practice. *Health Affairs*, 37(2), 183–190. <https://doi.org/10.1377/hlthaff.2017.1104>
- [Ekpo, I & Umoh, J. \(2003\) *Operations of Informal sector in Nigeria; Challenges and Prospects*. http://www.onlinenigeria.com.](http://www.onlinenigeria.com)
- Kumar, P. (2019). Financial Inclusion and Micro and Small Enterprises Growth. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.3534952>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.
<https://doi.org/10.1257/jel.52.1.5>
- Nagarajan, P. (2021). Financial inclusion through micro finance. *Global Journal for Research Analysis*, 1–4. <https://doi.org/10.36106/gjra/7607165>
- Nkwede, E. F.Nkwede, J. O., & Nkwagu, L. C., (2021). Dilemma of Financial Exclusion and Inclusion in Africa: can Nigeria, South Africa and Ghana be compared? *African Journal of Social Issues*, 4(1), 105-122.
- Nwanne, T. F. (2020). Critical Research on Impact of Contributory Pension Scheme on Economic Growth in Nigeria. *Global Advanced Research Journal of Management and Business Studies*, 4(8), 66-76.
- Odo, C., & Chinedu, O. (2016). The contributory pension scheme and the financial system development in Nigeria. *Innovative Marketing*, 12(2), 16–21.
[https://doi.org/10.21511/im.12\(2\).2016.02](https://doi.org/10.21511/im.12(2).2016.02)
- Ogundele, O., & Adekunle, F. (2021). Addressing Payment Timeliness Challenges in Micro Pension Plans: Insights from Nigeria. *Journal of Economic Development*, 10(2), 180-195.

- Ojo, O. A., & Oluwaseun, O. O. (2023). Awareness and participation in the micro pension plan among informal sector workers in Nigeria. *African Journal of Economic and Management Studies*, 14(3), 275-292. <https://doi.org/10.1108/AJEMS-03-2022-0154>
- Olayinka, A., & Temitope, E. (2022). The role of timely payments in pension scheme effectiveness: A study of Nigeria's informal sector. *Nigerian Journal of Financial Management*, 8(2), 150-167. <https://doi.org/10.3386/w29292>
- [PenCom, \(2021\) July Monthly Report. https://www.pencom.gov.ng/wp.](https://www.pencom.gov.ng/wp)
- Rinofah, R., Tyas, H. N., & Kusumawardhani, R. (2022). Financial inclusion, financial management, and micro business performance. *Sebelas Maret Business Review*, 7(2), 84. <https://doi.org/10.20961/smbr.v7i2.70674>