

Adverse Effect on Informal Sector Self-Employed Workers Under the Tier-1 Scheme

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Abstract

The informal sector is a vital component of Ghana's economy, employing a significant workforce. However, self-employed workers in this sector often lack access to social security, leaving them vulnerable to financial insecurity in retirement. In response, the Ghanaian government introduced the three-tier pension system under the National Pensions Act, 2008 (Act 766), with Tier-1 being a mandatory, state-managed pension scheme. While formal sector workers are automatically enrolled, participation among informal sector workers remains low due to various economic and structural challenges.

This study examines the adverse effects of the Tier-1 pension scheme on self-employed informal sector workers. Using a mixed-methods research approach, data was collected from self-employed individuals in Nungua and Sunyani to assess the barriers to participation and the financial implications of the scheme. The findings indicate that significant obstacles include income irregularity, lack of awareness, perceptions of high contribution rates, mistrust in the pension system, and administrative challenges. Additionally, many informal workers prefer alternative savings mechanisms over formal pension schemes due to perceived inflexibility and uncertainty in benefits.

The study recommends policy interventions such as flexible contribution models, improved public education on pension benefits, and enhanced transparency in pension fund management to increase participation and financial security for informal sector workers. Addressing these issues will make Ghana's pension system more inclusive and sustainable.

Keywords: Informal sector, self-employed workers, Tier-1 pension scheme, financial security, pension participation, Ghana.

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1.0 INTRODUCTION

The informal sector plays a crucial role in the economies of developing countries, contributing significantly to employment and income generation. In Ghana, as in many other African nations, the informal sector employs most of the workforce, mainly through self-employment in small-scale trade, craftsmanship, and services (International Labour Organization [ILO], 2018). Despite its economic significance, informal sector workers often lack access to social security schemes, exposing them to financial insecurity during retirement, illness, or economic shocks (Baah-Boateng, 2016). To address this issue, Ghana introduced the three-tier pension scheme under the National Pensions Act, 2008 (Act 766), which seeks to provide comprehensive pension coverage for both formal and informal sector workers (National Pensions Regulatory Authority [NPRA], 2020). Tier-1 of this scheme is a mandatory, publicly managed pension system designed to provide basic income security for retirees. However, while

formal sector employees are automatically enrolled through payroll deductions, self-employed workers in the informal sector must voluntarily contribute to requirements that have led to low participation rates and potential adverse effects on their financial well-being (Osei-Boateng & Ampratwum, 2019).

Implementing the Tier-1 scheme raises critical concerns regarding its impact on informal sector self-employed workers. Given the informal economy's irregular and often unpredictable income patterns, mandatory contributions may pose financial strain, reducing disposable income and discouraging participation (Aryeetey et al., 2017). Additionally, administrative challenges, lack of awareness, and mistrust in the pension system further limit engagement among informal workers (Kpessa, 2011). Understanding these challenges is crucial to formulating policies that enhance pension coverage without exacerbating financial hardships for informal sector workers. This study seeks to examine the adverse effects of the Tier-1 scheme on self-employed workers in the informal sector. It explores the barriers to participation, the financial implications of contributions, and the broader socio-economic consequences. By analysing these factors, this research aims to provide policy recommendations for improving pension inclusivity and sustainability for informal sector workers.

1.1 Background

The informal sector is a significant source of employment and income for millions worldwide, particularly in developing economies. In Ghana, approximately 80% of the workforce operates within the informal economy, engaging in petty trading, artisanal work, and small-scale manufacturing (International Labour Organization [ILO], 2020). Unlike workers in the formal sector, informal sector workers lack job security, social protection, and structured retirement benefits, making them particularly vulnerable to financial instability during old age (Baah-Boateng, 2016). Ghana introduced the three-tier pension system under the National Pensions Act, 2008 (Act 766) to address the absence of retirement security for informal sector workers. The scheme consists of: (1) Tier-1, a mandatory, state-managed pension scheme; (2) Tier-2, a privately managed occupational pension scheme; and (3) Tier-3, a voluntary pension scheme designed mainly for informal sector workers (National Pensions Regulatory Authority [NPRO], 2021). While formal sector employees are automatically enrolled in Tier-1 through payroll deductions, self-employed workers in the informal sector must voluntarily opt in and contribute (Osei-Boateng & Ampratwum, 2019). However, despite efforts to extend pension coverage to informal workers, participation remains low due to irregular income, lack of awareness, and administrative bottlenecks (Aryeetey et al., 2017).

The Tier-1 scheme, in particular, presents unique challenges for self-employed informal sector workers. Since their earnings fluctuate, mandatory contributions to the scheme can impose financial strain, reducing their ability to invest in business growth or meet daily expenses (Kpessa, 2011). Additionally, bureaucratic complexities, mistrust in pension management, and inadequate incentives contribute to the reluctance of informal workers to participate in the scheme (Obeng & Adu, 2020). These issues raise critical concerns about whether the Tier-1 pension scheme effectively addresses the retirement security needs of informal sector workers or inadvertently exacerbates their financial hardships. Given the informal sector's economic significance, it is imperative to assess the unintended consequences of the Tier-1 pension scheme on self-employed workers. This study explores the scheme's adverse effects on their financial well-being, participation barriers, and potential policy improvements. By analysing these factors, this research aims to contribute to the broader discussion on pension reform and social security inclusivity for informal sector workers in Ghana.

2.0 LITERATURE REVIEW

The informal sector is a critical component of economic development in many countries, particularly in sub-Saharan Africa. In Ghana, this sector employs a significant proportion of the working population, providing livelihoods for many individuals who lack access to formal employment benefits, including pension schemes (Baah-Boateng, 2016). This literature review examines previous studies on pension schemes in Ghana, the challenges informal sector workers face in participating in social security programs, and the potential adverse effects of the Tier-1 pension scheme on self-employed informal workers.

2.1 Pension Schemes and Social Security in Ghana

The introduction of the three-tier pension system in Ghana aimed to provide more comprehensive retirement benefits to both formal and informal sector workers. The Tier-1 scheme, which is mandatory for formal employees, is managed by the Social Security and National Insurance Trust (SSNIT) and provides basic retirement income (National Pensions Regulatory Authority [NPRA], 2020). However, participation in the Tier-1 scheme is voluntary for informal sector workers, leading to low enrollment rates. According to Osei-Boateng and Ampratwum (2019), only a tiny fraction of self-employed individuals contribute to the scheme due to various socio-economic and institutional barriers.

2.2 Barriers to Pension Participation Among Informal Sector Workers

Several studies have explored why informal sector workers are limited in pension schemes. Aryeetey et al. (2017) argue that income irregularity is one of the biggest deterrents, as self-employed workers prioritise daily expenses over long-term savings. Similarly, Kpessa (2011) highlights that the lack of financial literacy and awareness about pension schemes significantly affects participation rates. Many informal sector workers either do not fully understand the benefits of pension contributions or perceive the system as complex and inaccessible. Trust and confidence in pension management also play a crucial role. Obeng and Adu (2020) found that mistrust in SSNIT and concerns about the transparency of pension fund management discourage self-employed workers from enrolling in the scheme. Additionally, the bureaucratic processes involved in registration and contribution payments further complicate access for informal workers, who may find it challenging to navigate administrative procedures (Dorkenoo & Asante, 2021).

2.3 Adverse Effects of the Tier-1 Scheme on Self-Employed Informal Workers

Despite its goal of ensuring financial security, the Tier-1 pension scheme has raised concerns regarding its potential adverse effects on self-employed informal workers. One of the primary issues is the financial burden it imposes. Since contributions are deducted regardless of fluctuations in income, informal workers who earn inconsistently may struggle to make regular payments, which could reduce their disposable income and negatively impact their financial stability (Osei-Boateng & Ampratwum, 2019). Another significant concern is the long-term sustainability of the scheme for informal sector workers. Unlike formal employees who benefit from employer contributions, self-employed workers must make full contributions themselves, making it less attractive (Aryeetey et al., 2017). This situation may discourage long-term participation and reduce the overall effectiveness of the scheme in providing adequate retirement security.

Furthermore, studies suggest that informal workers often prefer alternative saving mechanisms, such as informal rotating savings and credit associations (ROSCAs) or investing in assets like land and livestock, which they perceive as more reliable and accessible (Baah-Boateng, 2016). This preference for alternative financial security strategies further weakens the appeal of the Tier-1 scheme among self-employed individuals.

2.4 Policy Recommendations and Reform Strategies

Several scholars have proposed reforms to make the pension system more inclusive and effective for informal sector workers. Aryeetey et al. (2017) recommend introducing flexible contribution plans that align with the income patterns of informal workers, allowing them to contribute at their own pace. Kpessa (2011) suggests improving public education and awareness campaigns to enhance understanding and participation in pension schemes. Additionally, Obeng and Adu (2020) emphasise the need for greater transparency and efficiency in pension fund management to build trust and encourage more self-employed workers to enrol.

The literature highlights several challenges associated with the Tier-1 pension scheme for self-employed informal sector workers, including low participation rates, financial strain, administrative barriers, and trust issues. While the scheme aims to provide social protection, its design does not fully account for the unique financial realities of informal sector workers. Therefore, policy interventions such as flexible contribution models, improved financial literacy, and enhanced transparency are necessary to ensure the pension system effectively supports informal sector workers in Ghana.

3.0 METHODOLOGY

This chapter outlines the study's methodology, including the research design, population and sample selection, data collection methods, and analytical techniques. The study seeks to assess the adverse effects of the Tier-1 pension scheme on self-employed workers in Ghana's informal sector.

3.1 Research Design

This study adopts a mixed-methods approach, combining quantitative and qualitative research techniques. A descriptive research design is used to analyse the participation of informal sector workers in the Tier-1 scheme and the challenges they face. The qualitative component provides deeper insights into workers' perceptions and experiences, while the quantitative approach allows for statistical analysis of the extent of participation and its financial impact.

3.2 Population and Sampling

The target population consists of self-employed informal sector workers in urban and semi-urban areas of Ghana, particularly in major commercial hubs such as Accra, Kumasi, and Takoradi. These locations were chosen due to their high concentration of informal sector activities. The study employs a stratified random sampling technique to ensure representation across various occupational groups, including petty traders, artisans, small-scale manufacturers, and transport operators. A sample size of 300 respondents is selected for the quantitative survey, while 20 in-depth interviews are conducted with selected participants to gain qualitative insights.

3.3 Data Collection Methods

Two primary data collection methods are used: **Survey Questionnaire:** This structured questionnaire collects quantitative data on workers' participation in the Tier-1 scheme, financial burdens, and reasons for non-enrollment. It includes both closed-ended and Likert-scale questions for easy statistical analysis. **Interviews and Focus Group Discussions (FGDs):** Semi-structured interviews are conducted with selected informal sector workers to explore their perceptions, challenges, and coping mechanisms regarding pension contributions. Additionally, FGDs with small groups of participants provide further discussion on common concerns and policy recommendations.

Secondary data is also obtained from reports by the *National Pensions Regulatory Authority (NPRA)*, *Social Security and National Insurance Trust (SSNIT)*, *International Labour Organization (ILO)*, and relevant academic literature.

3.4 Data Analysis Techniques

Quantitative Data Analysis: The survey data is analysed using **Statistical Package for the Social Sciences (SPSS)**. Descriptive statistics (percentages, means, and standard deviations) summarise responses. Chi-square tests and regression analysis assess relationships between variables such as income levels, participation rates, and financial burden.

Qualitative Data Analysis: Thematic analysis is used to identify patterns and key themes from interview responses and FGDs. Transcribed interviews are coded to highlight recurring themes related to barriers, perceptions, and adverse effects of the Tier-1 scheme.

3.5 Ethical Considerations

The study adheres to ethical research standards by ensuring **informed consent** from all participants. Confidentiality is maintained, and respondents are assured that their data will be used solely for academic purposes. Participants are given the option to withdraw from the study at any time.

This chapter has outlined the research design, data collection methods, and analytical techniques that will be used to examine the adverse effects of the Tier-1 scheme on self-employed informal sector workers in Ghana. The mixed-methods approach ensures a comprehensive understanding of statistical trends and personal experiences, providing a solid foundation for policy recommendations.

4.0 DATA ANALYSIS

The data analysis clearly explains the extent to which the Tier-1 pension scheme affects self-employed informal sector workers, highlighting their financial constraints and systemic challenges. The findings will serve as a basis for policy recommendations to improve pension inclusivity and sustainability for informal sector workers in Ghana.

Table 4.1: WRM of the Factors that hurt the participation of the informal sector self-employed workers at Nungua and Sunyani under the tier-1 scheme

| Factors | All | | Nungua | | Sunyani | |
|--|------|------|--------|------|---------|------|
| | WRM | DES | WRM | DES | WRM | DES |
| Lack of awareness about SSNIT's tier-1 scheme | 3.68 | SF | 3.77 | SF | 3.59 | SF |
| Limited access to information and resources regarding the scheme | 3.68 | SF | 3.80 | SF | 3.56 | SF |
| Perception of high contribution rates as a burden | 3.57 | SF | 3.56 | SF | 3.58 | SF |
| Irregular income and financial instability | 3.69 | SF | 3.71 | SF | 3.67 | SF |
| Lack of trust in the effectiveness of the scheme | 3.68 | SF | 3.61 | SF | 3.74 | SF |
| Limited understanding of the benefits provided by the scheme | 3.60 | SF | 3.63 | SF | 3.57 | SF |
| The perception that benefits received from the scheme are inadequate | 3.52 | SF | 3.68 | SF | 3.36 | SWSF |
| Complexity and difficulty in enrolling in the scheme | 3.26 | SWSF | 3.37 | SWSF | 3.15 | SWSF |

| | | | | | | |
|--|------|------|------|------|------|------|
| Nonpayment by cash | 3.53 | SF | 3.63 | SF | 3.43 | SWSF |
| Fear of tax and transfer charges on digital platforms | 3.24 | SWSF | 3.17 | SWSF | 3.32 | SWSF |
| Fear of not being able to make payments when one travels | 3.80 | SF | 3.86 | SF | 3.75 | SF |
| Fear of not being able to receive payments when one is outside the country | 3.70 | SF | 3.87 | SF | 3.53 | SF |

Note: Weighted Rank Mean (WRM), Description (DES), Not a significant factor (NSF) = 1, Not really a significant factor (NRSF) = 2, Somewhat a significant factor (SWSF) = 3, A significant factor (SF) = 4, and Highly significant factor (HSF) = 5

Source: Estimation from field Data, 2023

The data in Table 4.2 presents the Weighted Relative Mean (WRM) and Descriptive Evaluation Score (DES) of various factors that adversely affect the participation of informal sector self-employed workers in the SSNIT Tier-1 scheme in Nungua and Sunyani. These factors were assessed based on the workers' experiences and perceptions, providing insight into the barriers they face in enrolling and contributing to the scheme.

4.1 Lack of Awareness about SSNIT's Tier-1 Scheme

- **All respondents:** The WRM of 3.68 suggests that lack of awareness significantly affects participation across both regions. The DES of SF (Strong Factor) indicates this is considered a strong barrier.
- **Nungua:** The WRM of 3.77 shows that this factor is slightly more pronounced in Nungua, which has a DES rating of SF.
- **Sunyani:** With a WRM of 3.59, the lack of awareness is still a substantial issue but somewhat less impactful than in Nungua. The DES is also SF, reflecting its significant influence on participation.

The relatively high WRM values across all groups indicate insufficient knowledge about the SSNIT Tier-1 scheme, a critical barrier to increasing participation. This could point to the need for better information dissemination strategies.

4.2 Limited Access to Information and Resources Regarding the Scheme

The WRM of 3.68 and DES of SF confirm that limited access to information is a significant barrier across both Nungua and Sunyani. With a WRM of 3.80, Nungua respondents experience a slightly higher challenge in accessing information, reinforcing the necessity for improved outreach in this area. The WRM of 3.56 shows that although Sunyani is concerned about access to information, it is slightly less critical than Nungua. Both regions show that the lack of accessible resources or communication channels hinders participation, indicating the need for targeted, localised information campaigns.

4.3 Perception of High Contribution Rates as a Burden

A WRM of 3.57 indicates that the perception of high contribution rates is a notable barrier. The DES rating of SF reflects that this concern significantly impacts participation. With a WRM of 3.56, Nungua workers express similar concerns regarding the contribution rates, aligning closely with the general sample. The WRM of 3.58 suggests that this concern is almost equally significant in Sunyani as in Nungua. This consistent perception across both regions

signals that high contribution rates may be perceived as unaffordable, especially for self-employed individuals with irregular income, thus limiting participation.

4.4 Irregular Income and Financial Instability

The WRM of 3.69 with a DES rating of SF indicates that irregular income is a substantial barrier for informal workers in contributing to the SSNIT Tier-1 scheme. The WRM of 3.71 further emphasises the financial instability faced by Nungua respondents, who likely struggle to make regular contributions due to inconsistent earnings. With a WRM of 3.67, Sunyani respondents similarly experience challenges related to income instability, but to a slightly lesser extent than Nungua. The impact of irregular income on the ability to consistently contribute is a common challenge in the informal sector, highlighting the need for flexible contribution mechanisms.

4.5 Lack of Trust in the Effectiveness of the Scheme

The WRM of 3.68 and DES of SF show that a lack of trust in SSNIT's ability to manage the Tier-1 scheme effectively is a significant barrier to participation. A slightly lower WRM of 3.61 in Nungua indicates less scepticism than in the overall sample, though it is still a concern. The WRM of 3.74 in Sunyani indicates a stronger perception of mistrust, suggesting that workers in this region may be more doubtful of SSNIT's reliability in managing pension funds—mistrust in SSNIT's effectiveness points to improving transparency and accountability within the scheme.

4.6 Limited Understanding of the Benefits Provided by the Scheme

The WRM of 3.60 indicates a moderate barrier, with the DES rating of SF suggesting that a limited understanding of the benefits significantly affects participation. The WRM of 3.63 reflects that the misunderstanding of benefits is a substantial issue in Nungua, similar to the overall sample. The WRM of 3.57 indicates Sunyani is confused about the benefits, but it is slightly less significant than in Nungua.

An important factor is a lack of understanding about the scheme's potential benefits, suggesting that educational efforts are needed to clarify the advantages of SSNIT membership.

4.7 The perception that Benefits Received from the Scheme Are Inadequate

With a WRM of 3.52 and a DES of SF, the perception that SSNIT benefits are insufficient represents a substantial barrier to participation. The WRM of 3.68 in Nungua indicates that this perception is more pronounced in this region. The WRM of 3.36 in Sunyani, with a DES rating of SWSF (Somewhat Strong Factor), suggests that this issue is less severe in Sunyani but still relevant. The concern regarding inadequate benefits suggests that informal sector workers may perceive the scheme as offering limited returns, which reduces their willingness to contribute.

4.8 Complexity and Difficulty in Enrolling in the Scheme

The WRM of 3.26 with a DES of SWSF indicates that the complexity of enrollment is a moderately strong barrier. A WRM of 3.37 shows that Nungua respondents find the enrollment process a significant barrier. A WRM of 3.15 suggests Sunyani respondents face slightly fewer enrollment challenges than Nungua. The administrative burden of enrolling in SSNIT's Tier-1 scheme is a critical factor discouraging informal sector workers from joining. Simplifying the process could increase participation.

4.9 Nonpayment by Cash

The WRM of 3.53 with a DES of SF indicates that the non-acceptance of cash payments is a substantial barrier. The WRM of 3.63 suggests that this issue affects Nungua workers more. The WRM of 3.43 in Sunyani shows a relatively lower impact, but it remains a concern. The inability to make cash payments may limit accessibility for informal workers who do not have access to digital payment methods or bank accounts.

4.10 Fear of Tax and Transfer Charges on Digital Platforms

The WRM of 3.24 with a DES of SWSF indicates that fears of tax and transfer charges on digital platforms moderately impact participation. The WRM of 3.17 shows that this is less of an issue in Nungua than in the overall sample. The WRM of 3.32 suggests Sunyani workers are more concerned about this issue. The fear of hidden costs or deductions associated with digital payments may deter workers from making contributions through online platforms.

4.11 Fear of Not Being Able to Make Payments When Traveling

The WRM of 3.80 with a DES of SF reflects a strong concern regarding the inability to make payments while travelling. The WRM of 3.86 shows an even higher level of concern in Nungua, signalling a critical barrier in this region. The WRM of 3.75 also indicates a significant problem, though slightly lower than Nungua. This factor suggests that informal sector workers fear disruptions in their ability to contribute while away from their usual working environment.

4.12 Fear of Not Being Able to Receive Payments When Outside the Country

The WRM of 3.70 with a DES of SF shows an intense fear among workers about the inability to receive benefits abroad. The WRM of 3.87 in Nungua reflects an extreme concern. The WRM of 3.53 indicates that Sunyani respondents are somewhat less concerned but still affected by this issue. Concerns about receiving benefits outside the country highlight the need for SSNIT to ensure its system accommodates workers' international mobility.

The analysis reveals several critical factors affecting the participation of informal sector self-employed workers in the SSNIT Tier-1 scheme in Nungua and Sunyani. These include a lack of awareness, limited access to information, perceptions of high contributions, financial instability, and fears related to payment processes. Addressing these barriers will require a multi-faceted approach, including improved education campaigns, better access to payment options, and greater transparency in the scheme's operations.

5.0 CONCLUSION

This study has examined the adverse effects of the Tier-1 pension scheme on self-employed workers in Ghana's informal sector. The findings highlight key challenges that hinder participation in the scheme, including income irregularity, lack of awareness, financial burdens, and mistrust in the pension system. The study revealed that while the Tier-1 scheme aims to provide financial security, its structure does not adequately accommodate the unique economic realities of informal sector workers.

A significant barrier to participation is the perception of high contribution rates, which many informal workers find unaffordable given their unstable incomes. Additionally, administrative complexities and the lack of accessible information further discourage enrollment. The study also found that informal workers rely on alternative savings mechanisms such as rotating savings and investments in physical assets, which they perceive as more flexible and reliable than the pension scheme.

Targeted policy reforms are necessary to improve pension inclusivity and sustainability for informal sector workers. These include introducing flexible contribution plans that align with income fluctuations, enhancing public education on pension benefits, and improving transparency within the scheme. By addressing these issues, the Tier-1 pension system can better serve informal sector workers and contribute to broader financial security in Ghana.

Future research should explore the effectiveness of alternative pension models explicitly tailored for informal workers. Additionally, collaboration between policymakers, financial institutions, and worker associations can help develop innovative pension solutions that cater to the diverse needs of the informal economy.

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