

# Solvency and Sustainability of the SSNIT Pension Scheme

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## Abstract

The objective of the study was to assess the solvency and sustainability of the SSNIT Pension Scheme. For this, secondary data were obtained from the Financial Statement of SSNIT spanning the period 2005-2016 was analyzed using Microsoft Excel 2013. A number of management staff were also interviewed. The results concluded that against the objectives set in the National Pensions Act, 2008 (Act 766) pensions in Ghana have still not been unified seven years into the coming into force of the Act. It was also established that benefits and administrative cost are increasing faster than increase in contribution inflows. It was also established that the scheme is close to reaching its equilibrium and may not be sustainable into the future. The study suggested that SSNIT should make recommendations to government to implement the provisions of the Act fully. Also, there is the need for stakeholder consultations for a review of the scheme to either increase the contribution rate, or increase the compulsory retirement age or both. Finally, current provision in the law where a cap is placed on the contributions allowed from a member should be reviewed in favour of rather capping benefits paid to member on their retirement.

**Keywords:** SSNIT; Pension; Scheme; Solvent; Sustainable; Ghana

## Introduction

According to the World Social Security Report (2010/2011) authored by the International Labour Organization (ILO) “the biggest risk faced by an individual when he reaches old age is either poverty or income insecurity because of the inability of that individual to earn income partially or completely” [1]. Pension systems are a way of replacing incomes of workers on the occurrence of certain contingencies. In Ghana, these contingencies are Old Age, Invalidity and Survival Benefits paid to the beneficiaries of a member of the scheme or a pensioner with unexpired pension.

The World Social Security Report went further to state that social security should be considered to be a right to be enjoyed by every human being and should be seen as economic and social necessity. The report went further to suggest that countries should provide the necessary security for individuals to cope with life’s major needs to assist them adopt to the changing economic, political demographic and social needs.

Kenny [2] opined that retirement should be seen as a change in lifestyle as against an end to a worker’s productive life. This being the case, it is necessary for both the individual and the state to plan on how to provide the individuals some income replacement at the time of the retirement.

Barr [3] is also of the view that though population aging is predictable, countries do not plan towards combatting its effects and also its implications on society. In Ghana, as at the year 2010, old age population stood at 6.5% of a total population of 24.7 million people. This is expected to keep increasing in the light of rising life expectancy and decline in fertility.

Before the introduction of a formal Social Protection System in Ghana, the extended family system was the only system that took care of the aged and invalids in society. According to Dei [4] the introduction of Social Security in 1965 in Ghana contributed to interrupting this traditional extended family system of care.

The pension system in Ghana has gone through a number of reforms. Ashidam [5] argued that reforms have taken place a number of times leading to the current three tier pension scheme. The current system is backed by the National Pensions Act, 2008 (ACT 766) as

amended by the National Pensions (Amendment) Act 2014, (ACT 883). The current law mandates the Social Security and National Insurance Trust (SSNIT) to operate the first tier scheme which is a compulsory National Pension Scheme. The second tier is also compulsory but like the third tier which is voluntary are managed by private fund managers.

It is an established fact that no Actuarial Evaluation was conducted to determine the sustainability of the scheme which is a defined benefit scheme which is partially funded. The main purpose of this study is to determine the sustainability of the current national first tier scheme operated by the SSNIT under ACT 766 as amended by ACT 883 in light of the fact of the following:

- Reduction in the rate of contribution to the scheme from 17.5% to only 13.5%
- Transferring 2.5% of the contribution received to fund the National Health Insurance Scheme
- Introduction of ceiling of ceiling of the maximum contributions. (that is determining the maximum salary on which contribution shall be paid).
- Increase in benefit expenditure by:
  - a. Making old age lump sum payments higher by using 75% of the 91 day treasury bill rather than 50% of the 91 day treasury bill rate that was used before the reforms
  - b. Increase in the guarantee pension payments from 12 years to 15 years
  - c. Reduction in the minimum contribution rate from 20 years (240) months to 15 years (180) months.

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## Review of Previous Studies

Pension systems can be said to be schemes set up by the state with the aim of replacing income to the aged in situations where other arrangements are insufficient. Rofman et al. [6] stated that pension is a contract under which a fixed sum is paid on a regular basis to a person after retirement from service. The Organization for Economic Co-operation and Development (OECD) in 2005 put forth that pension fund is a pool of assets forming legal entity with contribution from members towards a plan for the purpose of financing future benefits. On his part Agbobli [7] expressed pension as “a means of investment for retirement purposes”.

This researcher also wish to define pension as a long term plan where an individual's contribution is paid back to him/her at future time normally after retirement and this payment will continue until after the death of the individual.

State pensions emanates from social protections and under such schemes the state supports the pensioner at the point of retirement or grant support to invalids when they become permanently incapacitated. According to Aidt et al. [8] State Pensions or Social Security Schemes accounts for a significant portion of the disposable incomes of the aged. On his part, Obeng [9] construed Social Security as a scheme set up by law for the protection of members through a series of measures against economic and social distress.

Pension plans can be private or state sponsored. Most private pension fund are Defined Contribution Schemes. Under this arrangement, the contributor is paid a lump sum made up of his contribution plus any accrued interest. In other words, the value of the investment at the point of maturity. Most state sponsored funds are, however, Defined Benefits Schemes. Under such pension schemes, the law determines the calculation of the benefits and also the conditions under which they will be paid. Under defined benefit schemes, payments are made to the beneficiaries until their death. There are also Occupational Pension Schemes under which employers create a scheme for their workers [10].

### Pension schemes in Ghana

According to Darkwa [11] society has always had systems of providing a form of social security in the event of unforeseen circumstances in life such as old age, and disability. Long before the coming of the colonial masters the Ghanaian society had dependent on traditional forms of social protection. Among the Ewes for example, they form societies with the sole aim of assisting members in their time of need. Members, however, make monthly contributions towards their common course. The objective is to get assistance for their security, welfare and social protection.

### Social security in Ghana

According to Dei [12] Social security in Ghana was formally started by the colonial masters to cater for the needs of urban workers. Rural farmers and informal workers were not included. Before the current Act, Social Security in Ghana had gone through a number of reforms. According to Darkwa [11] Social Security in Ghana was originally modeled in line with the British system. It started with the enactment of the Development and Welfare Act in 1940. This Act covered British nationals and a few local workers in the Civil Service.

Cap 30 was later introduced to encourage loyalty and efficiency in the colonial civil service [13]. It was not a contributory scheme but rather funded by taxes. Cap 30 did not cover all Civil Servants but those

who were perceived to be loyal and without discoloration for the last ten years in the service. Due to the discrimination nature of Cap 30 and also its effect on the national budgets, the Social Security and National Insurance Trust was established in July of 1965 to administer social security in Ghana. The scheme in 1965 was a provident fund scheme under which members were paid a lump sum benefits. According to Dixon [14] this benefit was made up of a member's contribution and investment returns. During that period the contribution of members was invested in special long term bonds with very low interest. The objective was government to have cheap funds for long term development.

As a result of workers agitations, PNDC Law 247 was passed to convert the Provident Fund Scheme into a defined benefit scheme. The benefits under the scheme were Old Age Pension, Invalidity Pension and Death and Survivors Benefits. The minimum pension was 50% of the best three years average salary of a member and the maximum pension was 80% of the average best three year salary of a member. Members under the scheme have an option to take 25% of the pension as lump sum. To qualify for disability benefits, a member should have contributed to the scheme for not less than 36 months and should have been certified by a medical board that the member was incapable of working again. A member who qualified under invalidity could also opt for a 25 lump sum payment upfront.

The scheme under PNDC Law 247 was a contributory scheme were members contributed 5% of their salary and the employer contributed 12.5% of the worker's salary bringing the total contributions to 17.5% of the employee's basic salary. It was a partially funded scheme and the contract of generation approach was used. Contract of generation refers to the situation where current of generation of workers fund the pension payments of the generation on pension. This continues until the fun reaches equilibrium and a reform is made to make adjustment to either the contribution rate or the retirement age.

Workers agitations again lead to the pensions reforms of 2008 with the passage of the National Pension Act, 2008 (ACT 766). Under this Act, the three tier pension scheme was created. Tier one which mandatory is administered by SSNIT. Tier two which is also mandatory is managed by private fund managers. Tier three is voluntary and is also managed by private fund managers. Under tier one employees contribute 5.5% of their salaries and employers add 13% of the employees' salary to bring the total contribution to 18.5%. Out of this, 13.5% is paid to SSNIT monthly. SSNIT is mandated to transfer 2.5% to the National Health Insurance Authority to fund the National Health Insurance Scheme with only 11% left for the running of the scheme. The 5% out of the 18.5% contributed is paid to private fund managers to run the second tier scheme.

Benefits under the new scheme remained Old Age Pension, Invalidity Pension and Survivors Lump Sum payments. However, the number of months of contribution to qualify for pension was reduces from a minimum of 20 years (240 months) to 15 years (180) months. The minimum pension is now 35% of the members best three year salary and the maximum pension also reduce to 60% of the best three years average salary of the member. Unger the current law, National Pension Regulatory Authority (NPRA) is the regulator of pensions in Ghana. This body was not in existence under previous schemes.

### Research Problem and Objectives

The study is focused on whether the objectives of the reforms under ACT 766 as amended by ACT 883 has been met. The specific objectives are:

- Whether all Pension Schemes existing before the reforms have been unified
- Investigate challenges facing the scheme
- Assess the solvency of the scheme
- Assess the sustainability of the scheme.

### Research questions

In line with the general objectives, the study sought to answer the following questions:

- What are the challenges facing the scheme?
- Have we been able to unify all existing Schemes prior to the reforms?
- Is the current scheme solvent?
- Is the current scheme sustainable?

### Significance of the study

Seven years after the implementation of ACT 766 as amended by ACT 883, that makes it mandatory for “all employees with employer and employee relationship with an identified employer” to contribute towards the first tier scheme, only 1.3 million out of a total worker population of 9.7 million contribute towards the scheme as at 31<sup>st</sup> December 2016. This position is in line with a study conducted by Dasgupta, (2001) who stated that about 85% of the nation’s population work in the informal sector.

As at the end of December 2016, 8.4 million of the working population are in the informal sector of the economy. Apart from not being covered under the SSNIT Scheme, one cannot be sure that they have a plan in place that can guarantee them income replacement at their old age or when they are permanently incapacitated. That aside, one cannot be sure whether the large labour force in the informal sector have any savings plan that will lead to capital formation that will contribute to towards increasing the overall GDP growth of the nation.

The Act also planned to have the following institution to contribute to the scheme as part of the plan to unify Pensions Schemes in Ghana within five years of its implementation:

- Public Universities
- Research Institution
- Police Service
- Fire Service
- Judges and the Judicial Service
- Public and Civil Servants under Cap 30 Pension.

The only exception under the law is the military. That is The Ghana Armed Forces. The aim of the study will not only find out whether the above objectives have been achieved but will also add to existing literature on Social Security in Ghana. The outcome of the study will be useful not only to academia but will also be useful to other stakeholders in the Pensions Industry in Ghana and will also be useful to politicians and parliamentarians in Ghana.

### Research Design and Methodology

The objective of the study is to assess the solvency and sustainability of the SSNIT Pension Scheme. Secondary data obtained from the

Financial Statements of SSNIT covering the period 2005-2016 used and some selected management staff were interviewed and the results analyzed using Microsoft Excel 2013.

### Data analysis

Both quantitative and qualitative analysis techniques were employed in analyzing and interpretation of data. In-depth structured interview was also used to obtain information from key staff of Actuarial and Risk Departments of SSNIT. The interviews were recorded and later transcribed. Microsoft Excel (Office 2013) was used in analyzing the quantitative data.

According to Yin [15] the paramount objective of analyzing data is to treat evidence fairly to produce compelling analytical conclusions that will rule out alternative interpretations. Miles et al. [16] on their part stated that data analysis consist of three concurrent flows. These are data reduction, data display and drawing of conclusion. Data deduction is used when conclusion drawing is deemed to be valid when it is logically connected. The deduction method was used for this study.

### Discussion and analysis

The objective of this study was to assess the sustainability and solvency of the first tier mandatory pension scheme under the management of SSNIT. This section presents data obtained from the Financial Statements of SNNIT in tables and chats to give clear meaning to the findings.

### Challenges facing the scheme

The scheme as operated today is faced with a number of challenges. Paramount amongst them are increasing cost of administration and non-performing investments. Another major challenge is increasing cost of benefits that is growing more than the rate of growth in contribution received. This is evidenced in Table 1.

From the Table 1 above, even though contribution receipts was increasing, cost of benefits payments was increasing at a faster rate to the extent that benefits payment for 2016 was more than contribution receipts for that year.

### Have all existing schemes been unified?

Act 766 stipulated that existing schemes before its enactment would be unified to be managed by SSNIT within five years of the implementation of the Act. However, seven years after the implementation of the Act, the under listed schemes that were in existence prior to the implementation of the Act are still on their own pension schemes.

Year	Contribution (GHC,000)	Benefits Payments (GHC,000)	Difference (GHC,000)
2005	163,352	63,025	100,327
2006	245,821	79,871	165,950
2007	329,973	111,077	212,896
2008	358,931	163,433	195,498
2009	600,693	223,239	377,454
2010	488,764	310,732	178,032
2011	717,035	355,154	361,881
2012	761,145	443,151	317,994
2013	944,947	692,314	252,633
2014	1,590,234	941,271	648,963
2015	1,767,060	1,235,746	531,314
2016	1,518,480	1,748,834	230,354

**Table 1:** Contribution received and benefit payments from 2005-2016.

- Universities
- Research Institutions
- Police Service
- Fire Service
- Judges and the Judicial Service staff
- Public servants previously covered under Cap 30.

In addition to the above, Audit Service staff through a court action has succeeded in exiting the existing scheme managed by SSNIT. The effect on the scheme will be reduction in membership leading to a reduced contribution inflow.

### Solvency of the scheme

In Social Security parlance, solvency is defined as the ability of the scheme to pay the full scheduled benefits in the law at any point in time and on timely basis. Table 2 shows that the scheme is still solvent as at this point in time but very close to reaching its equilibrium.

Since the scheme is a partially funded one, the current generation of workers is contributing towards the payment of the current generation of pensioners. From Table 2, even though reserves are growing from year to year, the growth is lower than total expenditure. Table 3 that shows the Fund ratio will illustrate the position better. Fund Ratio is the level at which the Scheme can cover its future liabilities (for this study Benefits Payment and Administrative Costs) assuming no further contribution inflow is made. In other words, it depicts the number of years that the Fund Reserves at the end of a particular year will last based on the level of expenditure for the same year in the absence of no further contribution inflows.

### Sustainability of the scheme

In social insurance terms, a scheme is sustainable if the questions posed below get a positive answer.

- Is the contribution rate sufficient to finance the benefits prescribed in the law adequately, without any change or modification to the law?
- Is the current structure of the scheme viable for the future?

The scheme at this point in time is solvent. However, an actuarial review as at 31<sup>st</sup> December 2011 by the Government Actuary Department of United Kingdom (GAD-UK) concluded that the scheme had long term sustainability challenges and therefore needs urgent reforms to

address them. From the GAD-UK report, the scheme is expected to reach its equilibrium in 2018. A scheme is said to be at equilibrium when the total inflows (Contributions and investment returns) will just be adequate to meet total expenditure (Benefits, administrative and operational cost).

What this situation means is that at the current contribution rate of 11%, the current expenditure on benefits and administrative expenses is projected to exceed income from contribution and investment income. The signs are already clear in Table 1 above and further in Table 4.

### Conclusions and Recommendations

After the analysis of available data, the following discussions, conclusions and recommendations were made. The objective of the study was to establish whether the key objectives set up in the National Pensions Act 2008, (ACT 766) have been met seven years into its implementation and also assess whether the scheme is solvent and sustainable.

### Summary

The findings of this researcher are summarized in the points below:

- The numerous schemes have still not been unified seven years into the running of the scheme. Rather through a court action, staff of the Auditor Generals Department are out of the mandatory first tier scheme.
- The scheme is challenged in that whereas benefits and administrative cost are on the increase, contribution inflows and investment returns are on the decline.
- The scheme currently solvent but very close to reaching its equilibrium.
- In the case of sustainability, the current rate of contributions at the current rate of growth of the members is not enough to sustain the payments of benefits into the near future.

### Conclusion

Based on the findings in the summary above, this researcher can draw a conclusion that the SSNIT is seriously challenge. The scheme is expected to reach its equilibrium in the coming year. If this happens the scheme has to draw on its reserves to enable it pay benefits.

### Recommendation

Drawing from the above findings and conclusions drawn therefrom,

Year	Income Revenue (GH¢' 000)	Total Expenditure (GH¢'000)	Surplus of Income Expenditure (GH¢'000)	Net Increase in value of Investments (GH¢'000)	Net Income (GH¢'000)	Reserve (Fund at end of year) (GH¢'000)
2005	241,125	103,127	137,998	(86,803)	51,195	929,203
2006	374,852	125,985	248,867	3,921	252,788	1,181,991
2007	443,572	173,826	269,746	285,987	555,733	1,737,726
2008	518,837	225,798	293,039	203,842	496,881	2,234,607
2009	732,974	342,339	390,635	(244,578)	146,057	2,380,664
2010	704,342	403,654	300,688	225,118	525,806	2,900,609
2011	893,665	455,760	437,905	80,525	518,430	3,419,039
2012	1,287,386	588,824	698,562	1,62,995	861,557	4,280,596
2013	1,460,449	871,559	588,890	6,95,298	1,284,188	5,564,784
2014	1,900,460	1,174,321	726,139	1,136,395	1,862,534	7,427,318
2015	2,233,256	1,620,523	612,733	770,024	1,382,757	8,810,075
2016	2,501,366	2,182,612	318,754	(240,230)	78,524	8,888,600

Source: SSNIT Financial Statements (2005-2016).

Table 2: Solvency of the scheme.

Year	Reserve fund @end of year (GH¢'000)	Total Expenditure (GH¢'000)	Fund Ratio
2005	939,203	103,127	0
2006	1,181,991	125,985	7.45
2007	1,737,726	173,826	6.80
2008	2,234,607	225,798	7.70
2009	2,380,664	342,339	6.53
2010	2,900,609	403,654	5.90
2011	3,419,039	455,760	6.36
2012	4,280,596	588,824	5.81
2013	5,564,784	871,559	4.91
2014	7,427,318	1,174,321	4.74
2015	8,810,075	1,620,523	4.58
2016	8,888,600	2,182,612	4.04

Source: SSNIT Financial Statements (2005-2016).

**Table 3:** Fund value and fund ratio (2005-2016).

Year	Total income (GHC,000)	Total expenses (GHC,000)	Difference (GHC,000)	Rate of change
2005	2,41,125	1,03,127	1,37,998	0
2006	3,74,852	1,25,985	2,48,867	80.34
2007	4,43,852	1,73,826	2,70,026	8.5
2008	5,18,837	2,25,798	2,93,039	8.52
2009	7,32,974	3,42,339	3,90,635	33.3
2010	7,04,342	4,03,654	3,00,688	-23.03
2011	8,93,665	4,55,760	4,37,905	45.63
2012	12,87,386	5,88,824	6,98,562	59.52
2013	14,60,449	8,71,559	5,88,890	-15.7
2014	19,00,460	11,74,321	7,26,139	23.31
2015	22,33,256	16,20,523	6,12,733	-15.62
2016	25,01,366	21,82,612	3,18,754	-47.98

Source: SSNIT Financial Statements (2005-2016).

**Table 4:** Total inflows against total expenses.

SSNIT should make a recommendation to the government of Ghana to implement the provisions of Pensions Act fully. All the numerous schemes should be unified. In addition stakeholders should be engaged to enable the nation get an understanding on the need to increase either the contribution rate or increase the compulsory retirement age or both. Under the current Act, the NPRA has set a maximum contribution that a member is allowed to make. Currently the maximum salary on which contribution can be made is GHC 25,000. This should be reviewed for members to contribute on any amount but rather cap the benefit that they will earn in future.

## Limitation of the study

Time was the major limiting factor of this study. This researcher had to combine his academic work with his normal work as the Finance Coordinator of SSNIT. The notice given for this work was really very short. That aside, data for this study was largely from secondary sources except for the interview of key management colleagues.

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