

A Study into the Financial Sustainability of Offinso Mutual Health Insurance Scheme

Kofi Owusu Yeboah^{1*} MOSES KORMEDODA²

1.School of Business, Spiritan University College, P.O.Box 111, Ejisu, Ashanti, Ghana.

2.Offinso Mutual Health Insurance Scheme, P. O. BOX. 431 Offinso, Ashanti Ghana

*E-mail of the corresponding author: Sirkoymwayo@gmail.com

Abstract

It is widely recognized that a strong financial base is a prerequisite for an effective health care delivery system. Currently, Governments in sub-Saharan Africa are facing serious financial constraints in their attempts to provide basic health services to their people (Abekah-Nkrumah, et.al 2009). The purpose of this research was to determine: the adequacy of funding of Offinso Health insurance scheme; the relationship between revenue trends and claims management from 2006 to 2011; and measures put in place to ensure the financial sustainability of the scheme. In doing so the funding adequacy, revenue trend and claims payment from 2006 to 2011, and financial sustainability strategies of Offinso health insurance scheme was examined. The research was both descriptive and causal. The research strategy was survey and single case holistic. The research philosophy was both positivism and interpretivism. The research also used both deductive and inductive approach. Data was analysed using quantitative techniques like mean, frequency, correlation, standard deviation, and others. The unit of analysis was staff of Offinso Health Insurance Scheme. The total population size of 20 was used. In addition extract from the financial records of the scheme was also used. No specific sampling technique was used since data was collected from the entire population. It was found out that the scheme is not adequately funded; there is a highly positive relationship between revenue and claims payment and that claims payment consumes substantial portion of total revenue; the scheme has adequate defensive strategies; there is poor prudent fund management; and inadequate sourcing strategies. Generally the scheme may be facing financial sustainability problems in the long run as evidenced in the research findings.

Keywords: Adequacy of funding, Financial sustainability, Mutual health insurance, Offinso.

1. Introduction

Many low-and middle-income countries rely heavily on patients' out-of-pocket health payments to finance their health care systems (Xu et al. 2007). According to the World Health Organisation (WHO), empirical evidence indicates that out-of-pocket health payment is the least efficient and most inequitable means of financing health care and prevents people from seeking medical care and may exacerbate poverty (WHO, 2000). There is a growing movement, globally and in the Africa region, to reduce financial barriers to quality health care generally, but with particular emphasis on high priority services and vulnerable groups (Witter and Garshong, 2009).

Health insurance schemes are increasingly recognized as a tool to finance health care provision in developing countries and has the potential to increase utilization and better protect people against (catastrophic) health expenses and address issues of equity (WHO, 2000). Health financing systems through general taxation or through the development of social health insurance are generally recognized to be powerful methods to achieve universal coverage with adequate financial protection for all against healthcare costs (Gobah and Liang, 2011). Many African countries including Ghana, Rwanda, Tanzania, Kenya and Nigeria are experimenting with a variety of comprehensive, social health insurance schemes that combine both private and public-funding arrangements (Carrin et al. 2008; Witter and Garshong, 2009).

It is widely recognised that a strong financial base is a prerequisite for an effective health care delivery system. Currently, Governments in sub-Saharan Africa are facing serious financial constraints in their attempts to provide basic health services to their people (Abekah-Nkrumah, et.al 2009). WHO (2010) added that in Ghana there are sustainability concerns with respect to the national Health Insurance scheme. The financial sustainability of the NHIS in Ghana is threatened by a number of factors. These factors include: There seem to be provider incentives to over-prescribe; Very generous benefit package to cover 95% disease burden; Ineffective referral system due to which patients are able to seek care from higher level facilities; and Under-developed monitoring systems within the NHIS. These concerns are partly addressed by the fact that the NHIS revenue is more stable due to ear marked tax revenue and that there are potential rich clients left to be covered. The share of paid enrolees has increased along with the decline in the 'Cash and Carry' payment in all the regions and the NHIS revenue is a dominant contributor to hospital revenues (WHO, 2010).

1.1. Problem Statement

It is widely recognized that a strong financial base is a prerequisite for an effective health care delivery system. Currently, Governments in sub-Saharan Africa are facing serious financial constraints in their attempts to provide

basic health services to their people (Abekah-Nkrumah, et.al 2009). This implies that a country cannot achieve quality health care for its people if it cannot achieve financial sustainability. However, financial sustainability comes with sources of funding. But the issue is not only entirely about sources of funding but the adequacy of the funds to support claim payments and other important expenditure. This study therefore sought to determine the adequacy of funding the Offinso Mutual Health insurance Scheme.

The second problem that has contributed to the conduct of this research is that a lot of concerns have been raised among Ghanaians as to the revenue positions of the National Health Insurance schemes. Managers of the scheme have often complained about lack of revenue to pay insurance claims. Added to this has been the accusation meted out to service providers over high insurance claims. Many Ghanaians believe that these service providers deliberately increased their tariffs just to demand higher claims. It has often been said that this behaviour was one of the main driving force that necessitated the introduction of capitation grant in Ashanti region. This study therefore sought to find out the relationship between revenue trends and claims payment trends of Offinso Health Insurance scheme from 2006 to 2011.

Lastly, a lot of people have doubted the financial sustainability of the health insurance scheme in Ghana. Many have even predicted the imminent collapse of the scheme if strategies are not put in place to ensure its sustainability. The onus therefore lies on Managers of National Health Insurance Scheme to adopt a comprehensive financial sustainability strategy to save the scheme from collapsing. This study therefore sought to find out the measures put in place by Managers of Offinso Health Insurance Scheme to ensure its financial sustainability.

1.2. Research Objectives.

From the review of the problem statement, the following research objectives have been deduced:

- i. To determine the adequacy of funding for Offinso Mutual Health Insurance Scheme.
- ii. To determine the relationship between revenue trend and claims payment trend from 2006 to 2011
- iii. To determine measures put in place to ensure financial sustainability of the scheme.

1.3. Research Questions.

In line with the above research objectives, the following research questions will be asked:

- i. How adequate are the funding for Offinso Health Insurance Scheme?
- ii. What is the relationship between revenue trends and claims payments trends of Offinso Health Insurance Scheme from 2006 to 2011?
- iii. What measures has Managers of Offinso Health Insurance Scheme put in place to ensure its financial Sustainability?

2.0. Literature Review.

2.1. Nature of Insurance.

The term insurance describes any measure taken for protection against risks. When insurance takes the form of a contract in an insurance policy, it is subject to requirements in statutes, court decisions and the regulations of an administrative agency empowered with the authority to direct and supervise the implementation of particular legislative acts (Seddoh, et.al, 2011). According to Free Dictionary.com (2011), insurance is a contract whereby, for a specified consideration, one party undertakes to compensate the other for a loss relating to a particular subject as a result of the occurrence of designated hazards. Seddoh, et.al (2011) added that in an insurance contract, one party, the insured, pays a specified amount of money, called a premium, to another party, the insurer. The insurer, in turn, agrees to compensate the insured for specific future losses. Agyepong, et.al (2009) agreed and added that the losses covered are listed in the contract, and the contract is called a policy. The two requirements of a contract for a specified consideration and a premium for compensation for specific future losses against a policy are a significant part in determining the exact nature of the insurance transaction agreed (Seddoh, et.al, 2011).

It is a fact that insurance is based on a willingness to pay premiums in return for access to known benefits on demand. Beatie, et.al (1998) noted two systems of premium payment: the household or individual level. The premiums may also be paid by or on behalf of specific individuals in the population. In many publications 'contribution' and 'premium' are used interchangeably (Agyapong and Adjei, 2008). According to Seddoh, et.al (2011), this is technically problematic as 'contributions' do not provide the same level of expectations in a premium-paying insurance. In its most basic explanation, 'contributions' may confer membership on the contributor to benefits under a sponsored insurance. This does not translate into holding a policy based on a contract, though any person contributing to a sponsored insurance that is instituted under legislation cannot be denied the right of benefits identified, provided the service is available (Seddoh, et.al, 2011).

2.2. Reasons for Health Insurance.

Health insurance may be organised either as a private sector purchased insurance by individuals hedging against the risks and adverse effect of ill-health or as social health insurance. Private health insurance is usually issued as a product by general insurance agencies or a dedicated health insurance company along the general definition and expectations of a generic insurance framework (Seddoh, et.al, 2011). While there is no standard definition of Social Health Insurance (SHI), it can generally be perceived as “a financial protection mechanism, for health care, through health risk sharing and fund pooling for a larger group of population” (WHO 2003, p5). The definition is obviously inadequate in distinguishing SHI from other forms of insurance as all insurance including private ones share risk and pool funds in cross subsidy. A basic contrast in our view between SHI and private insurance is that Social Health Insurance builds on the premise that the poor are not income credit worthy and uninsurable through private mechanisms. It becomes generally imperative that the poor are supported through social solidarity mechanisms (Seddoh, et.al, 2011). This process transforms social capital through the population’s own financial contributions to a mutual organisation over which they have direct management control responsibilities and into safety net systems in anticipation of care during a health event. Government may participate to support access to a minimum package of health services, cheaper drugs or even providing financial subsidies but has no direct participation in managing the scheme. While private insurance is an individual purchase, social health insurance is a conscious community risk pooling (Seddoh, et.al, 2011). There are various reasons for introducing Social Health Insurance in developing countries. The often-stated reason is improving health financing given the increasing evidence of a direct relationship between how a health system is financed and the performance of its functions and achievement of its goals (Preker and Carrin, 2004). During the 1980s, user fees became widely implemented throughout the developing world at the point of receiving health care services (Seddoh, et.al, 2011).

In 1985 the Bamako Initiative, adopted as a global policy supporting user fees, advocated for cost sharing and community participation to increase the sustainability and quality of health services. The level of fees differ from patient groups, applied to different services and charged at different levels between public and private facilities or primary level and hospital levels to cover all or part of the cost of services provided (Gilson and Raphealy 2008). The World Bank justified the rationale for charging user fees as providing the additional revenue that could be used to improve efficiency and equity; reduce frivolous demand and encourage the use of low cost primary health care services (World Bank 2004). As an equity issue, various studies have drawn attention to the weaknesses and impact of user fees on the poorest people in developing countries. The poorer the country, the larger the share of health costs which is met by households through out-of-pocket expenditures. This can be as much as 66% of total health costs in low-income countries, 36% in upper middle-income countries, and 20% in developed countries, as a weighted average across the population (Seddoh, et.al, 2011). Gilson (1997) also argued that user fees generally affect service utilization negatively, a major financial barrier to access; suppress demand and increase inequities in access between the rich and poor, and urban and rural populations. Evidence from Kenya and Tanzania suggests that due to user fees, the rich tend to consume more publicly financed hospital care per capita than the poor. This implies that the rich receive a disproportionate share of government subsidies (Griffin and Shaw, 1995). Another health financing factor prompting the need for insurance is dwindling domestic resource allocation to health. Contributing factors include: a ‘decline in health spending caused by a decline in government revenues as a share of GDP; growth of the private and informal sectors where tax compliance was lower; a shrinking of traditional tax bases such as state-owned enterprises; and pressures for tax cut from a population experiencing declines in real income’ (Wagstaff and Moreno-Serra 2009). To this, one may add a dwindling external aid flow. The target of allocating 0.7% of developed country GNI as Official Development Assistance (ODA) to developing countries has not been met. Total net ODA from the 22-member countries of the OECD Development Assistance Committee (DAC), the world’s major donors, in 2008, was US\$ 119.8 billion. This represents 0.30% of members’ combined gross national income (GNI) (Seddoh, et.al, 2011). As of mid-2005, debt cancellation commitments under the Highly Indebted Poor Countries initiative were under-funded by approximately US\$ 12.3 billion. This has prompted a series of reactions and commitments by heads of states. In 2000, governments in Africa agreed to allocate at least 15% of their annual national budgets to fund the health sector (Seddoh, et.al, 2011). The commitment was reaffirmed in the Maputo Declaration. Recent resolutions (WHO, 2005) have shown that the commitments are becoming difficult to achieve because of low domestic and external resource mobilisation. In May 2005, the fifty-eighth World Health Assembly adopted a resolution (WHO 2005) urging member states to consider using alternative mechanisms of resource mobilisation including social health insurance. Many countries are also beginning to embrace universal health coverage (UHC) as a viable financing mechanism. UHC is defined by the World Health Organisation (WHO) as “access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access.” Although models for UHC vary from one country to another, governments are reorganising their national health systems to share health costs more equitably across the population and its life cycle, instead of concentrating the burden on then few who face catastrophic illness in any given year (WHO,

2005).

With increasing funding gaps and diminishing known sources of funding and the drive for universal coverage, Social Health Insurance (SHI) becomes appealing. It is seen as a way of removing the impact of health expenditure on the poor, protecting health spending in the health sector and facilitating increases in health resource availability. It also holds the potential for promoting a more efficient health system (Seddoh, et.al, 2011). Given these reasons, the objectives for governments pursuing an insurance policy may be summarised as: mobilise additional non-governmental resources and transfer some or all of the cost of care to those who can afford to pay; change the source and pattern of provider payments and related incentives to keep down costs within health schemes so as to slow down cost growth rates; improve technical efficiency by separating the financing and provision of services, thereby introducing competitive mechanisms into the health sector; and expand access to health services by transferring resources from those who can afford insurance to the poor (Seddoh, et.al, 2011).

1.3. Nature of Financing determines Type of Insurance.

It is a fact that insurance is based on a willingness to pay premiums in return for access to known benefits on demand. Beatie, et.al (1998) noted two systems of premium payment: the household or individual level. The premiums may also be paid by or on behalf of specific individuals in the population. In many publications 'contribution' and 'premium' are used interchangeably (Agyapong and Adjei, 2008). According to Seddoh, et.al (2011), this is technically problematic as 'contributions' do not provide the same level of expectations in a premium-paying insurance. In its most basic explanation, 'contributions' may confer membership on the contributor to benefits under a sponsored insurance. This does not translate into holding a policy based on a contract, though any person contributing to a sponsored insurance that is instituted under legislation cannot be denied the right of benefits identified, provided the service is available (Seddoh, et.al, 2011). Premiums, on the other hand, are risk-based determined fees that are paid against a contract policy which is held and redeemable under laws of specific performance. It is individualised and risk-assessed. In the appropriate use of the term 'premium,' there is a principle of ability to pay for desirable benefits that naturally segregates and may lead to adverse selection. The individual has a choice and different insurance companies compete on the price and package offered (ibid). Lewis (2007) observes another determinant particularly on how premium levels relative to income and the premium prices relative to medical expenditures affect the probability of purchasing health insurance. The income bracket of individuals disposes them towards buying or not buying health insurance. The complexity of the policy bought will correlate directly with the amount of disposable income. The free health insurance market therefore has a built-in mechanism for adverse selection and accounts for the probability of moral hazards (ibid). Social Health Insurance schemes by their nature attempt to guard against adverse selection, or discrimination on the basis of status or disease condition (Beatie, et.al, 1998). In Arhinful's paper, Social health insurance should also guard against abuse and moral hazards (Arhinful, 2003).

A premium by nature discriminates on the basis of both status or disease condition and index for risks of moral hazard. Premium thus may be an inappropriate term to employ under Social Health Insurance where there is no defined insurance policy or levels of contractual benefits. Payments under Social Health Insurance may be better referred to as 'contributions'. Given the different systems of establishing an insurance fund, it is important to distinguish language that is used to express them rather than a simplistic classification between private and social health insurance (Seddoh, et.al, 2011). For instance, Lewis (2007) identified an alternative to premium based insurance systems. This is a mixed financing arrangement that includes tax-based revenue allocation by governments as a component of the resource envelope under Health Insurance. It may be adduced in our opinion that the success of tax-based revenue allocation insurance relies on the efficiency of the tax system and political discretion. In anticipation of the resources to be mobilised, the benefit package may be restricted and can be issued in legislation or statute. This may be an inclusive, exclusive or both an inclusive and exclusive list. It, however, is not a guarantee that the benefit package may be available on demand. Where insurance is predominantly tax-based and contributions do not translate into rights to determine the nature of the benefits or the governance of the scheme such as in mutual health insurance schemes, it is more appropriate in our opinion to refer to it as Government Issued Health Insurance (GIHI) (Seddoh, et.al, 2011).

Seddoh, et.al (2011) distinguishes between the two on the basis that a Social Health Insurance (SHI) should have a firm basis in membership decisions in the management of the scheme and its scope of operations. Government may participate by providing resource subsidy, facilitate the transaction environment and regulate it to protect the citizen's right, but may not have a right to legislate away the decision-making authority of the scheme manager or the benefits of the members. A Government Issued Health Insurance (GIHI) may be regulated like private or social insurance, but they are very different. The recipients of government insurance do not have to pay premiums, and do not receive the same level of coverage available under private insurance policies. The regulation of the insurance scheme may be given to an administrative agency empowered with the authority to direct and supervise the implementation of the particular health insurance legislative acts. These

agencies are government bodies that may be called commissions, corporations, boards, departments, authorities or by similar references. In a Government Issued Health Insurance (GIHI) government is the sole decision maker in relation to the management, scope of operation, level of contributions and the benefits of the members (Seddoh, et.al, 2011). According to them Government Issued Health Insurance is predominantly a tax-based insurance and contributions do not translate into rights of holding a redeemable policy on demand but provide membership access to services available within a defined benefit package (Seddoh, et.al, 2011). There is always a possibility that government can legitimately take away any or all aspects of the scheme and benefit by the legislature. However, in law and under a Government Issued Health Insurance (GIHI), if legislature issues insurance and it remains in force, it cannot refuse it to a person who qualifies for it (Seddoh, et.al, 2011).

2.4. Health Insurance in Ghana Context. Ghana's health financing context: the National Health Insurance Scheme.

To address financial constraints for the poor and improve equity in access to care, Ghana passed a National Health Insurance law in 2003 (GOG 2003), mandating the establishment of District-wide mutual health insurance schemes (DMHIS) (henceforth called schemes) (Jehu-Appiah, 2011). Gobah and Liang (2011) added that Ghana's National Health Insurance Scheme (NHIS) is a fusion of the traditional Social Health Insurance and Mutual Health Insurance and administered peripherally through 145 district-wide mutual health insurance schemes with a central system at the national level to collect formal sector contributions. The scheme is designed to promote social health protection through risk equalization, cross subsidization, solidarity, equity and quality care. The Health Insurance law (Acts 650) allows for the establishment and operation of three types of health insurance schemes in Ghana namely: District Mutual Health Insurance Schemes (DMHIS), Private Commercial Health Insurance Schemes (PCHIS) and Private Mutual Health Insurance Schemes (PMHIS). However, it is only the DMHIS that shall be provided with subsidy from the National Health Insurance Fund (GOG, 2003). Enrolment in DMHIS is legally mandatory but is facing non-compliance, as it is a social policy that is difficult to enforce, given the large informal sector for which there is no database and the need for formal sector workers (SSNIT contributors) to voluntarily pay a registration fee to be enrolled (MOH 2009). The National Health Insurance Authority (NHIA) mandates a pre-defined benefits package that covers 95% of the disease burden in Ghana. Services covered include outpatient consultations, essential drugs, inpatient care and shared accommodation, maternity care (normal and caesarean delivery), eye care, dental care and emergency care. The DMHIS contracts accredited providers (public, private and church-based) to deliver services to its members and reimburses them after submission of claims for services. This system separates the purchasing and provision functions across different stakeholders to increase transparency. Currently the NHIS reimburses providers based on the Ghana Diagnostic Related Groupings (G-DRGs) and fee for- service (FFS) for medicines using a medicines tariff list (MOH 2009). At the centralized level, the NHIS is regulated by the NHIA which also plays a key role in guiding management of the National Health Insurance Fund (NHIF). Revenues from the NHIF are used to provide a reinsurance mechanism for the District Mutual Health Insurance Schemes (DMHIS) and premiums for exempt groups (Jehu-Appiah, 2011).

2.5. Health Care Financing.

Financing health care to ensure equity has dominated the agenda of policy makers worldwide [World Health Organisation (WHO), 2005]. Policy makers worldwide have recognised the importance of equitable health system in achieving millennium development goals and that sustainable health care financing is critical for health system performance and for achieving universal coverage [Freedman, et.al, 2005]. Consequently, many low income countries are considering how to reform their health financing systems in a way that promotes equity and efficiency (Chuma and Okungu, 2011). In 2005, the 58th World Health Assembly called for health systems to move towards universal coverage, where all individuals have access to "key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access". It urged member states to ensure that health financing systems incorporate an element of pre-payment and risk pooling [WHO, 2005]. Equitable Universal health systems can be achieved not only on the basis of equitable health care delivery but also equitable health care financing. Equitable health care financing can be achieved only when health care payments are christened on ability to pay. This implies that there must exist some form of social financial protection for the poor and vulnerable in the form of risk and income cross-subsidies (that is, from the healthy to the ill and wealthy to the poor) (Chuma and Okungu, 2011). Equitable delivery of health services ensures that people benefit from health services according to need for care (McIntyre, 2007). Responding to the WHO call, the 56th session of the regional committee for health in Africa urged member states to strengthen their national prepaid health financing systems, to develop comprehensive health financing policies and strategic plans and to build capacity for generating, disseminating and using evidence from health financing in decision making. They also called on the World Health Organization (WHO) to provide support to fair and sustainable financing and to identify financing approaches most suitable for the African region [WHO, 2006]. Health

financing systems have three main components. These are revenue collection, pooling and purchasing [Kutzin, 2001]. Revenue collection refers to the process by which health systems receive money from households and organizations. Pooling refers to the accumulation and management of revenues to ensure that the risk of paying for health care is borne by all the members of the pool and not by each contributor individually. It embodies the insurance function within a health system. Pooling can be explicit or implicit: explicit, when people knowingly subscribe to a health insurance scheme; and implicit, where contributions are through tax revenue [Kutzin, 2001]. Purchasing is the process by which pooled funds are paid to providers in order to deliver a set of health interventions. It involves the transfer of pooled resources to service providers on behalf of the population for which the funds are pooled [Kotzin, 2001]. Purchasing can be strategic or passive [WHO, 2000]: strategic purchasing involves a continuous search for the best ways to maximise health systems performance by deciding which interventions should be purchased, while passive purchasing implies following a pre-determined budget or simply paying bills when presented. Strategic purchasing is best for universal coverage. In most cases, pooling and purchasing are implemented by the same organisation. Depending on how they are designed, payment mechanisms can influence provider behaviour [Kutzin, 2001]; they can act as incentive/disincentives to providers. Achieving universal coverage will depend on the extent to which countries combine these functions to ensure there is equitable and efficient revenue generation, the extent to which financing systems encourage cross-subsidisation and the degree in which health systems provide or purchase effective health services for the population [WHO, 2005].

2.6. Funding Health Insurance Scheme in Ghana.

The scheme is financed by a National Health Insurance Levy (NHIL) of 2.5% tax on selected goods and services, a 2.5% Social Security and National Insurance Trust (SSNIT) deductions from the formal sector, premiums from the informal sector and government budget allocations (Gobah and Liang, 2011). The informal sector annual premium was set by national regulation between GH¢7.20-GH¢48.0 (approximately US\$5.0- US\$34.0) per person based on assessed income and ability to pay. No coinsurance, copayment, or deductible is required at the point of service. There exist a National Health Insurance Fund (NHIF), financed from the NHIL, SSNIT deduction from the formal sector employees, funds allocated to the scheme by Parliament, returns on investments made by the National Health Insurance Council (NHIC) and others including grants, donations, gifts made to the fund (Gobah and Liang, 2011). The NHIF provides funds for reinsurance to the DMHIS, subsidy or outright pre-payment for the core poor and vulnerable who do not have the ability to pay and to support programs that improve access to health services. The NHIL accounted for about 61.5% and 61.0% of total income of the NHIS in 2008 and 2009 respectively. Formal sector contributions made up 16.9% and 15.6% while the informal sector premium constituted only 5.0% and 3.8 % respectively (NHIA, 2010).

Gobah and Liang (2011) added that Children under 18 years, adults 70 years and above, formal sector employees contributing to the Social Security and National Insurance Trust (SSNIT), and indigents are exempted from paying annual premiums. In July 2008, the Government of Ghana announced a free maternal care policy exempting all pregnant women from paying premium and processing fees. The package was to improve access to skilled attendance at delivery to help reduce maternal and child mortality rates and to improve attainment of MDGs 4 and 5. Mothers have access to the full package of antenatal, deliveries and postnatal care at accredited health facilities free of charge (NHIA, 2008; MOH, 2009). As of 2009, the exempt group constituted 70.6% of the total registrants, comprising of: children under 18 years (49.44%), aged above 70 years (6.67%), SSNIT contributors (6.10%), pregnant women (5.54%), indigents (2.32%) and SSNIT pensioners (0.53%). Total non-paying member accounted for about 65% (NHIA, 2010).

Adamba (undated) added that the National Health Insurance Authority (NHIA) mandates a pre-defined benefits package that covers 95% of the disease burden in Ghana. Services covered include outpatient consultations, essential drugs, inpatient care and shared accommodation, maternity care (normal and caesarean delivery), eye care, dental care and emergency care. The DMHIS contracts accredited providers (public, private and church-based) to deliver services to its members and reimburses them after submission of claims for services. This system separates the purchasing and provision functions across different stakeholders to increase transparency. Currently the NHIS reimburses providers based on the Ghana Diagnostic Related Groupings (G-DRGs) and fee-for-service (FFS) for medicines using a medicines tariff list (Ministry of Health, 2009).

2.7. Accreditation of Providers.

In order to provide the basic package of services, the NHIS covers both public and private health care providers at all levels of the health system, subject to their accreditation by the NHIA. At present all public and Christian Health Association of Ghana (CHAG) facilities (about 4000) have been given a provisional accreditation and 1551 private providers including (hospitals and clinics, maternity homes, pharmacies, licensed chemical shops and diagnostic facilities) have been accredited to provide service and to make the service more easily accessible to beneficiaries (NHIA, 2009). The National Health Insurance Scheme Act, 2003 (Act 650) mandates the NHIA

to accredit service providers before they can provide service to NHIS members. The primary goal is to ensure that healthcare services offered to card bearing members are of good quality. In pursuance of this, inspection of the first and second batches of health facilities was carried out in 2009. In 2010, a third batch of 915 facilities was inspected out of which 849 were accredited. Total accredited health facilities as at 31st December 2010 were 2,647. Claims are made by service providers and then submitted to the district schemes for payment using the Ghana-Diagnosis Related Group (G-DRG) rates for services and Fee-For-Service (FFS) for medicines. Discussions are ongoing to design, pilot and evaluate a per capita (capitation) provider payment system for primary care under the National Health Insurance Scheme aimed at improving; cost containment, control cost escalation by sharing risk between schemes, providers and subscribers, and improving efficiency through more rational use of health resources (NHIA, 2010).

2.8. Provider Payment Mechanisms

Health insurance is a way of pre-paying for the health services used by residents. In health insurance, payments made are spread over the subscribers and over time in the form of some agreed regular contribution. Services are provided according to need (Amarteyfio and Yankah, Undated). They added that important issues to address in setting up an effective and efficient health insurance system are: How money is collected from residents and pooled to pay for services; What services are covered by the insurance or the benefit package; How these services are purchased or paid for on behalf of the citizens who are part of the insurance scheme; also known as the provider payment method (ibid).

The Provider payment method is therefore “The mechanism used to transfer funds from the purchaser of health care services to the providers.” There are several different methods that can be used to pay providers under a health insurance scheme. These include Fee for service (this is often itemized), Diagnostic Related Groupings (DRG) and Capitation (NHIA, 2010).

There is no one perfect method and each method has advantages and disadvantages. Typically therefore most successful health insurance schemes use a combination of methods. Each method has advantages and disadvantages, and a skilful mix of methods taking into account each unique country context, including economics and history is the best approach. Effectively and efficiently managed health insurance schemes therefore provide often for a mix of provider payment methods, in a way that allows the advantages and disadvantages of the different methods to balance each other (Ile and Garr, 2012).

Current provider payment methods actually in use in Ghana currently are: Itemized Fee for service (FFS) for non-insured clients for both services and medicines; Diagnosis Related Groupings (DRG) for insured clients (Services only); and Itemized Fee for service (FFS) to pay for medicines for insured clients (Amarteyfio and Yankah, undated). Amarteyfio and Yankah (Undated) explain these as follows:

2.9. Claims Management.

According to NHIA (2010), reimbursement to accredited health care providers improved tremendously during the year under review. Funds were released to district Schemes for payment of claims on timely basis. NHIA placed advertisers’ announcement in the dailies reminding providers to submit their claims for prompt reimbursement and informing them of fund transfers to the various schemes with whom they have signed service contract. Thus, the issue of delayed reimbursement resulting in withdrawal of health care service to NHIS clients became a thing of the past (ibid). Several challenges have been identified with claims management within the NHIS. There have been delays in the submission of claims by some service providers, which is frequently occasioned by inadequate capacity within health facilities in the preparation of claims (Gobah and Liang 2011). The district scheme offices also do not have adequate capacity to vet claims effectively. To ensure timely payment of claims to providers, NHIS will implement a claims management system that is complete with a rules-based engine and workflow management software. To support the migration to electronic processing, the current claims module used at the schemes will be enhanced to make it more user-friendly (NHIA 2010). The pilot for this enhanced module has been complete in three schemes in the Greater Accra Region and rollout to the other regions will be completed by July 2011 (ibid). The NHIS intends to centralize claims at three zones (Ile and Garr, 2012). This initiative is expected to bring efficiency and effectiveness in the processing of claims (NHIA, 2010).

2.10. Financial Sustainability Strategy.

Financial sustainability of the scheme remains a big challenge to management given the increasing demand for health insurance and its consequent increase in health care service utilisation (Seddoh, et.al, 2011). It is projected that without any additional sources of funding to the current sources, the NHIF risks of dipping down by the close of year 2016. There is therefore the need to secure additional sources of funding for the scheme while implementing cost containment strategies to minimise operational cost (NHIA, 2010). It has been discovered that Sustainability and cost containment are major issues that confront the management of National Health

Insurance schemes in Ghana (NHIA, 2010). Pursuant to ensuring financial sustainability, a Clinical Audit Division was set up to embark on regular claims verification exercises to assure provision of quality health care services and to minimize financial leakages resulting from provider-side moral hazards (NHIA, 2010). The internal audit department was also upgraded to a division to empower it to effectively monitor the financial and operational processes within the NHIS. The activities of these two divisions have contributed immensely to the reduction in financial leakages and strengthening of internal controls. They have also contributed to the stimulation of behavioural change among health care providers and schemes officials. Providers and scheme officials who were found to have abused the system were sanctioned. The free maternal health policy was reviewed in order to inject some sanity into the system. An ultra-modern claims processing centre was established to process claims emanating from the teaching and regional hospitals. The year under review also witnessed the commencement of initiatives to introduce capitation as an additional provider payment mechanism to allow providers and subscribers to share the risks associated with the provision and utilisation of health care services at the health facilities (NHIA, 2010). Three areas have been identified for addressing the sustainability issue. These are defensive, prudent fund management and sourcing strategies (NHIA, 2010).

2.10.1. Defensive Strategy:

Developing cost containment measures to minimise leakages (NHIA, 2010). These will include: Establishing and operational Consolidated Premium Account to centralize premium payment into two designated accounts; Intensifying Clinical Audits in collaboration with provider groups; Introducing and piloting Capitation as an alternative payment mechanism; Collaborating with providers and subscribers to enforce the gatekeeper policy of the Ministry of Health; Linking treatment to diagnosis to improve rational use of medicines; Implementing uniform prescription forms to promote rational prescribing; and Using mystery shopping to identify inefficiencies and abuse in the entire NHIS system for redress (NHIA, 2010). It is also known that over 27% of the scheme's medicines cost is attributable to anti-malarial medicines. For example, in 2009 the scheme spent over GH¢ 51 million on anti-malarial medicines alone. The NHIS will therefore liaise with the Global Fund/Malaria Control Program office in order to benefit from the Affordable Medicines Facility – Malaria (AMFm) program. Savings from AMFm is projected to be over 50% annually (NHIA, 2010).

2.10.2. Prudent fund management:

Fund Management and Investment will be strengthened to ensure that NHIA funds are judiciously managed to generate optimal returns on investments (NHIA, 2010). One strategic investment initiative will be the development and maintenance of an optimal asset allocation system, through tactical asset timing and superior investment selection. This is because between 80% and 90% of the performance of the portfolio is determined by the mix of investment assets held in the portfolio. Additionally, the NHIS will develop a robust investment research team to continually review the investment environment, economic policies and capital market expectations for optimal investment decision making. NHIS will also identify and include in the portfolio, alternative investments with very low or negatively correlated returns. This is aimed at diversifying away unsystematic risks, for higher risk adjusted investment returns (NHIA, 2010).

2.10.3. Sourcing Strategy:

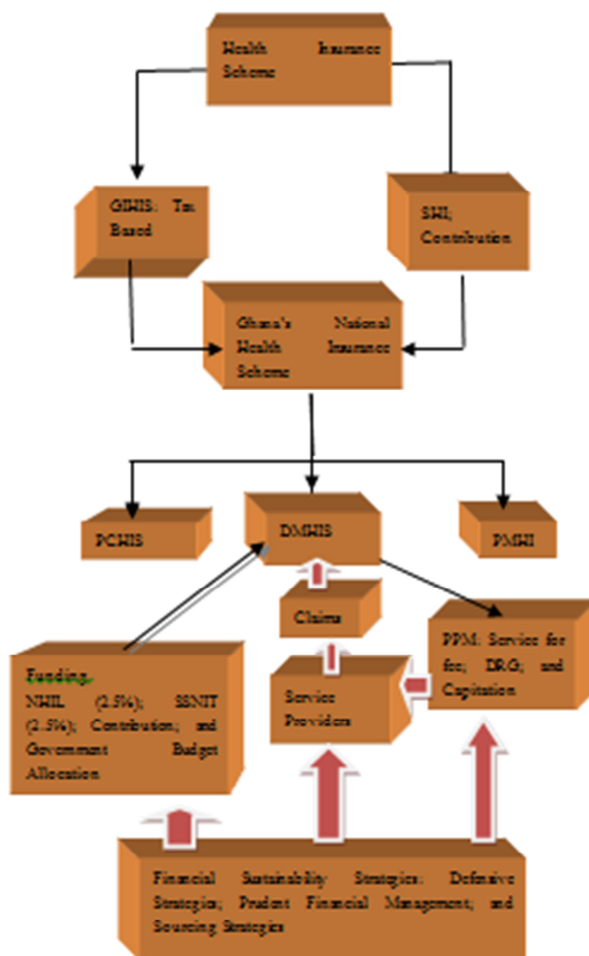
According to NHIA (2010), the sourcing strategies that can be adopted include: 1). Seeking additional funding through policy. The approach is to further diversify our sources of funds by securing additional stable sources of funds, and collaborate with stakeholders to increase the value derived from these sources. Sources to be considered include petro-chemical levy, 'sin tax', DVLA, NHIL increase; 2). Review premiums. Since they were set in 2004, premiums have not been reviewed. One of the strategies that the NHIS will seek to adopt is to review upwards the NHIS premium; 3). Internally-driven fundraising activities. This activity would be treated as ad-hoc programs aimed at raising funds for specific purposes and activities; and 4). Support from development partners. The NHIS will continue to welcome support from Development Partners (DP). For example, the Health Insurance Project (HIP) is expected to maintain support for the strengthening of the purchasing policies and mechanism, and the integrated claims management systems. According to HFC Bank (2004), there is some marginalisation in sourcing finance in Ghana. This problem is compounded by the fact that only few informal support exist by way of business angels which affect some companies ability to adopt modern technology (UNIDO, 2012). The UNIDO (2012) and HFC Bank (2004) assertions point to the inherent challenges in devising effective and efficient sourcing strategies. Bani (2003) pointed out that only few Small and Medium Scale Businesses (SMEs) are financed from commercial bank loans, government assistant programs or other informal sources.

2.11. Conceptual Framework of the Study.

From the above literature review the Authors have deduced the following conceptual framework as a basis for

this study. There are two main types of health insurance based on the nature of financing. An insurance scheme which is funded through taxation is called Government Issued Health Insurance (GIHI). On the other hand Social Health Insurance (SHI) scheme is a scheme which is funded through contribution by members. Ghana's Health insurance scheme is a fusion of GIHI and SHI. This is because National Health Insurance Scheme (NHIS) is funded through both taxation (National Health Insurance Levy (NHIL)) and contribution. There are three main types of Health insurance schemes established under NHIS. These are District Mutual Health Insurance Scheme (DMHIS), Private Commercial Health Insurance scheme (PCHIS), and Private mutual health insurance scheme (PMHIS). This paper will focus on DMHIS. DMHIS is funded through NHIL (2.5%), SSNIT deductions (2.5%) from the formal sector, premium payment from the informal sector, and government budget allocation. For the purpose of this research, the Author will look at the adequacy of funding Offinso Health Insurance Scheme. The Service providers send claims to the District Mutual Health Insurance Schemes. There are three main ways of provider payment mechanism. These are fee for services, diagnosis related grouping, and capitation. The provider payment mechanism is to ensure efficient claims management. However, the claims management system of NHIS is bedevilled with a lot of problems including: delays in submission of claims; inadequate capacity on the part of both service providers and District schemes; lack of revenue to cover claims; delay in payment of claims; and over invoicing. This thesis will only establish the relationship between revenue and claims of Offinso Health Insurance scheme. These problems have contributed to the issue of financial sustainability of the schemes. The Author thus asserts that, to ensure financial sustainability of the schemes it is imperative that managers of the schemes adopt financial sustainability strategies. These financial sustainability strategies can be categorised into three (3) main dimensions namely: defensive strategies; prudent financial management strategies; and sourcing strategies. These financial sustainability strategies must be imbued into funding, service providers and claims management; and lastly into the provider payment mechanism. This thesis will also look at how Offinso Health Insurance Scheme is using these strategies to create financial sustainability of the scheme.

Figure 2.1. Conceptual Framework of the Study.



3. Method.

This section covered the methodology of the research and the organisational profile of the case study as presented below:

3.1. Research Design.

This research was both descriptive, and causal. According to Robson (2002), Robson (2002) stated that the object of descriptive research is to 'portray an accurate profile of persons, events or situations'. This research is descriptive because it seeks to profile the adequacy of funding and the financial sustainability of Offinso Mutual Health Insurance scheme. Studies that establish causal relationship between two variables may be termed explanatory studies (Saunders, et.al, 2007). This studies is also causal (explanatory studies) because it sought to establish the relationship between revenue trends and claims payment trends of Offinso Mutual Health Insurance Scheme. The research strategy used was single case study holistic. This research also used deductive approach in meeting research objective two, and inductive approach in meeting research objective one. This means that the research philosophy is both positivism and interpretivism.

The population of the study was made up of the staff of Offinso Mutual Health Insurance Scheme. This according to the Manager of the scheme is 20. This means that the unit of analysis are the individual permanent staff of the scheme.

3.2. Sampling and Sampling Technique.

Sampling means the selection of a part of a group or an aggregate with a view to obtaining information about the whole (Saunders et.al, 2007). According to Saunders et.al (2007), for a population of 50, a sample size of 44 should be used to achieve a 5% margin of error. However, because the population is 20, it is prudent to collect data from the entire population. Since data was collected from the entire workforce, no specific sampling technique was used. This was due to the fact that there was no sampling.

3.3. Sources of Data.

The main sources of data were both primary and secondary sources. Primary source is the collection of 'first hand' information from the employees directly. In other words, primary data is data which is collected originally for current investigation. Primary data can be collected through instruments such as observation, interview, questionnaire, focus group, and others (Saunders, et.al, 2007). For this thesis data was collected using questionnaire. Questions on the questionnaire were used in answering research questions one and two. Secondary source on the other hand is data already collected by another organization or unit for a different purpose; it is then retrieved by the marketer for another purpose. In other words, secondary data is a data which has already been collected by an agency or individual and is available in a published form. It always has to be restructured before used. Secondary data already exist in accessible form. Example include reports, sales records, media accounts, journals, censuses (such as population census, employment census, and government census), academic surveys, invoices, receipts, vouchers, intranet and internet, etc (ibid). The secondary source of data for this research was revenue reports and claims report of Offinso Mutual Health insurance scheme for the periods 2006 to 2011. The data collected here was used in answering the second research question.

3.4. Data Collection and Instrument.

The data collection instrument used was questionnaire. The structured questionnaires were conveniently distributed among the permanent workers of the scheme. Since the researcher was a worker of the company, it was easy getting access to the employees and administering the questionnaire to them. The researcher administered the questionnaire personally. The questionnaire was developed using the Likert scale technique. The questionnaire comprised of 19 questions arranged in a tabular form. Tabular 1 comprised 5 statements testing funding adequacy of Offinso Mutual Health Insurance Scheme. Tabular 2 contained 7 statements testing defensive measures. Also tabular 3 contained 3 statements testing prudent fund management strategy. Lastly, table 4 contained 4 statements testing sourcing strategy. For the purpose of this study, only permanent employees were given questionnaires to fill.

3.5. Data Analysis Technique.

The study used quantitative methods to report the findings. The quantitative phase helped the researcher to generate descriptive and inferential statistics necessary to make deductions on how Offinso Mutual Health Insurance scheme is financed. After a careful review and cleaning of the collected data, the closed ended questions were coded and entered into a codebook from where they were keyed into a computer using Microsoft Excel. Analysis was carried out by typical statistical functions in the Excel. Functions used for analysis in this study were like mean, standard deviation, frequency, percentages, confidence level, median, and correlation. Frequency tables and bar graphs incorporating percentages were used analysing personal data of respondents.

Quantitative analysis used central tendency measure which was able to calculate means on scores on likert scale. The descriptive statistical tools on the likert scale were used to measure adequacy of funding, relationship between revenue and claims payments, and financial sustainability measures. Correlation coefficient was used to determine the strength of association between revenue and claims payments. The 5-point likert scale statements were coded as follows; 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree), and 1 (strongly disagree). If a respondent indicate “disagree or strongly disagree” it means that the respondent disagree with the statement as stated, thus agreeing with the negation of the statement. This means that if a particular construct records mean figure of 1, it does not mean that such a construct is the least relative to other construct in order of agreement or priority. However, what it means is that such construct is the highest relative to other constructs with mean figures below 3 in order of agreement with the negation of the construct as stated in the questionnaire. The implication of this for this study is that all constructs with mean figures below 3 are constructs that respondents do not agree with the researcher as stated but agree with the negation of the same construct which were not stated. Constructs with mean figures above 3 are constructs that respondents agree with the researcher as were stated. Therefore, it is these constructs that can be rank in order of agreement whiles constructs with mean figures below 3 can be rank in order of agreement with the negation of the constructs. The mean on a 5-point likert scale is 3.00 with a standard deviation (SD) of 1.58, standard error of mean (SEM) of 0.71, and a coefficient of variation of 52.67%. On a five point likert scale there is a 95 percent confidence level that the mean figure ranges between 2.31 and 3.61. These statistics on the 5-point likert scale was used as the benchmark for data analysis.

3.6. Ethical Consideration.

One very important consideration a researcher must not overlook is the issue of ethics in research (Saunders et.al, 2007). The researcher in accordance with this took steps to make sure that no respondent or any participant in this research work was harmed in any way. First of all, the researcher avoided contacting respondents on the blind side of the service providers. The researcher made sure that a verbal permission was sought and the aims and objectives of the study made known to the service provider as well as the respondents through introductory statement on the questionnaire. Both service providers and respondents were also assured of the fact that the study is only for the purposes of academics and not for any other dubious use. Participants were also not forced but rather encouraged to voluntarily participate. The researcher also made sure that personal or demographic information were kept confidential.

3.7. Brief Profile of Offinso Mutual Health Insurance Scheme.

The Offinsoman Health Insurance Scheme is one of the branches of the National Health Insurance Scheme. It is registered under the National Health Insurance Authority of Ghana and located at New Offinso in the Offinso South Municipality of Ashanti, a township of about 36 kilometers away from Kumasi, the capital of Ashanti Region. The scheme serves the people of both Offinso South Municipality and Offinso North District. The Offinsoman Health Insurance Scheme was set up in the year 2004 in both Offinso Municipality and Offinso North. The Scheme was registered as Limited Liability Company on the 4th of May 2005 and was issued with certificate to commerce Business on the 5th May, 2005. The scheme was then under the control of six management team engaged by the then Board of Governors. In February 2009, the Board was dissolved and Caretaker Committee was formed by the National Health Insurance Authority to have an over sight responsibility of the scheme. The Legislative Instrument (LI 1809) and Act 650 which established the scheme has since been revoked and a new Act 2012 (852) is in place to control the scheme.

4. Results.

4.1. Personal data of Respondents.

The personal data of the respondents are presented below:

Table 1. Personal Data of Respondents

Demographic Variables		Frequency	Percentage
Gender	Male	16	80%
	Female	4	20%
	Total	20	100%
Age	26-35 Years	16	80%
	36-45 years	4	20%
	Total	20	100%
Educational Background	Diploma or equivalent	4	20%
	1st Degree and More	16	80%
	Total	20	100%
Experience with the scheme	3-5 years	15	75%
	above 5 years	5	25%
	Total	20	100%

From figure 4.1, 20 percent representing 4 respondents are females with 80 percent representing 16 respondents are males. Also, 80 percent of the respondents fall within the age category 26-35 with 20 percent falling within 36-45. In addition, 16 respondents have university qualification with 4 of the respondents having some tertiary education which may include Polytechnic education, professional qualification, and training college, among others. Lastly, 75 percent of the respondents have worked with the OMHIS between 3 to 5 years with 25% indicating that they have worked with the scheme for 5 years and above. This clearly shows that none of the 20 respondents have worked with the scheme for less than 3 years.

4.2. Adequacy of Funding for Offinso Mutual Health Insurance Scheme

In this section respondents were asked to indicate the extent to which they agree or disagree to five statements testing the adequacy of funding of the scheme. The results are presented below:

Table 2. Descriptive Results for Adequacy of Funding

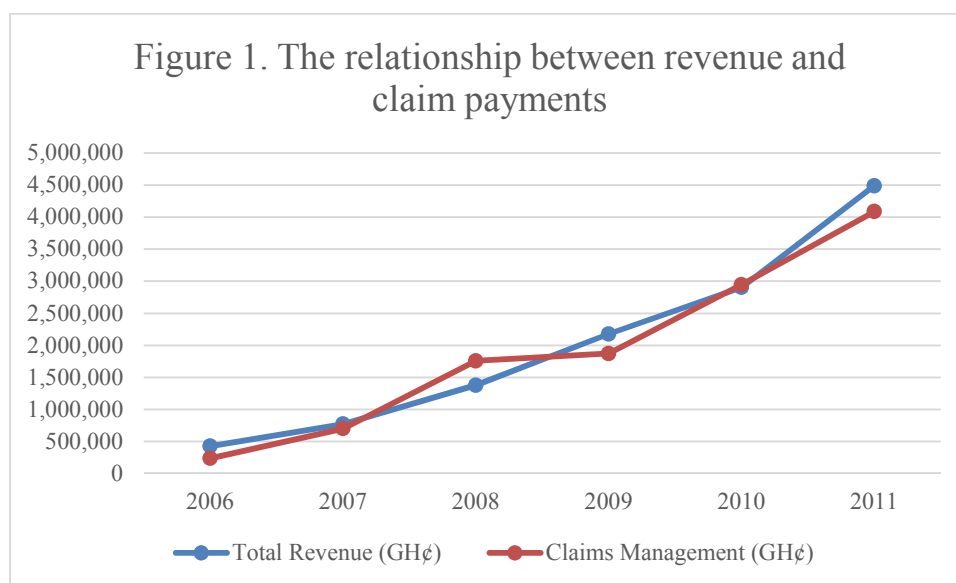
Funding Adequacy Constructs	N	Mean	SD	SEM	Var. (SD ²)	CV	Confidence level @ 95%	
							Lower	Upper
The scheme has always met its revenue target	20	3.20	1.04	0.23	1.09	32.60%	2.74	3.66
The scheme has always met claims payments timely	20	2.00	0.51	0.11	0.26	25.50%	1.78	2.22
The scheme is able to pay all administrative expenses	20	3.20	1.01	0.23	1.03	31.68%	2.76	3.64
The scheme is able to undertake capital intensive projects	20	2.40	0.36	0.08	0.13	15.14%	2.24	2.56
The scheme operates surplus budget not deficit budget.	20	3.20	0.65	0.03	0.43	20.44%	2.55	3.49
Average		2.80	0.72	0.14	0.59	25.07%	2.41	3.11

From table 2, only three constructs out of the 5 constructs tested recorded mean figures above three. Each of these constructs recorded mean figure of 3.20. This mean figure is just above the “Neutral response” but below the “agree response”. This means that the findings are on moderate side not on high side. These constructs are “the scheme has always met its target revenue”, “the scheme is able to pay all administrative expenses”, and “the scheme operates surplus budget not deficit budget”. The implication is that the respondents agree with the three constructs testing funding as stated. The other constructs namely: the scheme has always met claims payments timely; and the scheme is able to undertake capital intensive projects recorded mean figures of 2.00 and 2.40 respectively. The implication is that the respondents do not agree with the two constructs as stated. That is “the scheme has not always met claims payment timely”, “the scheme is not able to undertake capital intensive projects”. On average the entire constructs tested for funding adequacy recorded a mean figure of 2.80. This clearly indicates that per the respondents’ responses on the adequacy of funding, Offinso Mutual Health Insurance Scheme funding is not adequate to enable it carry on its activities efficiently and effectively. There is

95 percent confidence level that the mean figure for the entire constructs tested for funding adequacy is between 2.41 to 3.11. Since the mean figure for the entire construct is 2.80, it lies within the confident limits. The implication is that if other researcher tests the same constructs on the same sample, the researcher is 95 percent confident that the findings will lie between the confidence limit of 2.41 to 3.11.

4.3. Relationship between Revenue and Claims Payment.

In this section available data on total revenue and claims management were used. Only data from 2006 to 2011 was available. These data were extracted from the income statement of Offinsoman Health Insurance Scheme. The income statement was prepared in accordance with the appropriate Ghana National Accounting Standard (GNAS) and the International Financial Reporting Standards (IFRS) and in conformity with the National Health Insurance Act 2003, Act 650, section 99 (1-4), and the National Health Insurance Regulation 2004 sec 48. The total revenue and claim management as extracted from the income statement are presented below:



Per the above figure 1, total revenue received in 2006 was marginally higher than actual claims to be paid. However in 2007, total revenue and payments were almost equal with revenue rising marginally higher than claims payments in 2008 continuing to 2009. Also, in 2010 revenue and payments were almost equal with revenue rising marginally over claims in 2011. The actual revenue and claims payments are presented in table 3 below:

Table 3. Extract of total revenue and claims management from Offinsoman Health Insurance Scheme

Year	Total Revenue (GH¢)	Claims Management (GH¢)
2006	426,803	235,900
2007	770,609	700,685
2008	1,377,458	1,756,053
2009	2,177,552	1,870,981
2010	2,904,016	2,945,489
2011	4,489,452	4,088,207

Table 4. Mean distribution of total revenue and claims management

	Mean	Median	SD	Confidence level @95%	
				Lower	Upper
Revenue	2,024,315	1,777,505	1,511,059	815,238	3,233,392
Claims Management	1,932,886	1,813,517	1,421,545	795,434	3,070,338

From figure 1 and table 3, there is a positive relationship between total revenue and claims payment. This means that both the total revenue curve and claims payment move in the same direction. The correlation coefficient between total revenue and claims payment, returned figure of 0.98 which culminated into coefficient determination of 0.96 (96%). This clearly shows a highly positive relationship between the two variables

(revenue target and claims payment). The closeness of the relationship suggests financial distress. That is almost the total revenue of the scheme (96%) is spent on claims payment leaving very little to cover for other overheads. This assertion can be confirmed from table 4. Here the mean figure for total revenue and claims payment are GH¢2,024,315 and GH¢1,932,886 respectively. The median figures are GH¢1,777,505 and GH¢1,813,517 respectively with standard deviations of GH¢1,511,059 and GH¢1,421,545 respectively. There is 95 percent confidence level that the mean figure for the total revenue falls between GH¢815,238 and GH¢3,233,392 while that of the claims payment falls between GH¢795,432 and GH¢3,070,338. From table 3 the total revenue increased by 81%, 79%, 58%, 33%, and 35% in 2007, 2008, 2009, 2010, and 2011 respectively. The fact that the total revenue was increasing at a decreasing rate shows possible liquidity problems. On the claims payment the 2007 figure increased by 197% of the 2006 figure. The 2008 figure increased by 151% of the 2007 figure with 2009 figure increasing by only 7% of the 2008 figure. The 2010 figure increased by 57% on the 2009 figure with the 2011 figure increasing by 39% of the 2010 figure. A comparison of the marginal revenue and the marginal cost figures shows that with the exception of 2009 where the revenue grow more than claims payment, the claims management figures has been growing more than the revenue figures. This is another evidence of possible financial distress.

4.3. Financial Sustainability Measures

According to NHIA (2010), there are three (3) main measures put in place to ensure the financial sustainability of the scheme. These measures are defensive strategies, prudent fund management, and sourcing strategy. These strategies were therefore used to test the financial sustainability of the Offinso mutual health insurance scheme. The results are presented below:

4.3.1. Financial Defensive Strategy

In this section respondents were asked to indicate the extent to which they agree or disagree to seven statements testing the financial defensive strategy of the scheme. Respondents were to assess the 7 statements using 5-point likert scale technique

Table 5. Descriptive Results of the Defensive Strategy

Defensive Strategy Constructs	N	Mean	SD	SEM	Var. (SD ²)	CV	Confidence level @ 95%	
							Lower	Upper
The scheme has established and operationalizes a Consolidated Premium Account.	20	4.00	0.99	0.22	0.98	24.75%	3.57	4.43
The scheme has intensified Clinical Audits in collaboration with provider groups	20	3.80	0.73	0.16	0.53	19.12 %	3.48	4.12
The scheme has introduced <i>Capitation</i> as an alternative payment mechanism.	20	4.40	1.21	0.27	1.47	27.57%	3.87	4.93
The scheme has enforced the gatekeeper policy of the Ministry of Health.	20	3.80	1.39	0.31	1.93	36.54%	3.19	4.41
The scheme has linked treatment to diagnosis to improve rational use of medicines	20	4.60	1.35	0.07	1.83	29.42%	3.25	5.19
The scheme has implemented uniform prescription forms to promote rational prescribing	20	4.60	1.35	0.07	1.83	29.42%	3.25	5.19
The scheme is using <i>mystery shoppers</i> to identify inefficiencies and abuse in the entire NHIS system for redress	20	2.80	0.54	0.03	0.29	19.17%	2.26	3.04
Average		4.00	1.08	0.16	1.27	26.57%	3.27	4.47

From Table 5, all the constructs tested have mean figures above 3 with the exception of the use of mystery shoppers which recorded a mean figure of 2.80. This clearly indicates that the scheme do not use mystery shoppers as a defensive strategy. This implies that with the exception of the use of mystery shoppers, the scheme uses the other 6 constructs tested as a financial defensive strategy. Four (4) of the constructs tested had mean figures above 4. These include having consolidated account, the introduction of capitation, the linking of treatment to diagnosis, and the use of uniform prescription. The implication is that the scheme uses these

constructs more. On the other hand there were two constructs with mean figures above 3 but below 4. These are the use of clinical audits and the gatekeeper policy. All the constructs tested had standard deviation below 1.58. That is the responses given by the respondents are closer to the mean (that is the central tendency) than the closeness of the various responses on a five point likert scale to the mean (neutral). The mean figure for the entire constructs tested for financial defensive strategy is 4.00 (corresponding to the weight of the “agree” response) with a standard deviation of 1.08. The standard mean of error for the entire constructs tested is 0.16 with coefficient of variation of 26.57 percent. There is a 95 percent confidence level that the mean figure for the entire constructs tested for financial defensive strategies ranges between 3.27 and 4.47. The standard means of error (i.e. the standard deviation of the sampling distribution of the mean) of 0.16 means that the probability that the sample will not be a representative of the population is 0.16. Since this probability is low it clearly indicates that the sample is a true representative of the population. The above statistics just goes on to confirm that the Offinso Mutual Health Insurance Scheme is progressively implementing the National Health Insurance Authority defensive mechanism strategy as outline in their 2010 report (NHIA, 2010).

4.4. Prudent Fund Management Strategy

In this section respondents were asked to indicate the extent to which they agree or disagree to 3 statements testing the prudent financial management strategy of the scheme. Respondents were to assess the statement using likert’s scale technique.

Table 6. Descriptive Results of Prudent Fund Management

Prudent Fund Management Constructs	N	Mean	SD	SEM	Var. (SD ²)	CV	Confidence level @ 95%	
							Lower	Upper
The scheme invest funds to earn optimum returns	20	2.00	0.49	0.11	0.24	24.49%	1.79	2.21
The scheme has investment research team	20	1.80	0.54	0.12	0.29	29.81	1.56	2.04
The scheme continually monitors the investment environment.	20	2.00	0.49	0.11	0.24	24.49%	1.79	2.21
Average		1.93	0.51	0.11	0.26	26.26%	1.71	2.15

From Table 6, none of the respondents neither strongly agree nor agree with the three main constructs tested for prudent fund management. In fact eight out of the twenty respondents responded “neutral” to the three constructs tested for prudent fund management. The construct the scheme invested funds recorded a mean figure of 2 with the scheme having investment research team recording a mean figure of 1.80. The construct the scheme monitors the investment requirement also recorded a mean figure of 2. The entire constructs tested for prudent fund management recorded average mean figure of 1.93. This clearly shows that Offinso Mutual Health insurance scheme has not put in place measures to ensure prudent fund management clearly deviating from the NHIA assertion of using prudent fund management as a strategy to ensure the financial sustainability of the scheme. This lack of prudent fund management strategy may be as a result of the implementation of a consolidated premium account which is kept by the NHIA thereby denying the various mutual health insurance schemes the privilege of managing their own funds.

4.6. Sourcing Strategy

Here respondents were asked to indicate the extent to which they agree or disagree to with four (4) statements testing the sourcing strategy of the scheme. The results are presented below:

Table 7. Descriptive Results of Sourcing Strategy

Sourcing Strategy Constructs	N	Mean	SD	SEM	Var. (SD ²)	CV	Confidence level @ 95%	
							Lower	Upper
The scheme is collaborating with NHIA to seek additional fund through policy	20	2.75	0.23	0.05	0.05	8.23%	2.65	2.85
The scheme is taking steps to review premiums	20	3.20	1.04	0.23	1.09	32.60%	2.74	3.66
The scheme has increased it internally-driven fundraising activities	20	3.60	1.40	0.31	1.95	38.81%	2.99	4.21
The scheme is seeking support from development partners through NHIA	20	2.40	0.76	0.17	0.57	31.51%	2.07	2.73
Average		2.99	0.86	0.19	0.92	27.79%	2.61	3.36

From table 7 only two of the four constructs tested for sourcing strategy recorded mean figures above 3. The review of premium recorded a mean figure of 3.20 just above 3 with increasing fund raising activities recording a mean figure of 3.60. The other sourcing strategy recorded mean figures below 3. The average mean of the four constructs tested is 2.99. This is 0.01 mean points below the mean figure of 3. This clearly indicates that the respondents believe the scheme is not putting in place the right strategies to secure additional sources of funding.

5. Conclusion and Recommendations.

The objective of this work can be summed up as determining the funding adequacy of the Offinso Health insurance scheme, relationship between revenue and claims payment, and financial sustainability strategies of the scheme. Through the analysis of previous research in the field of financial sustainability of health insurance schemes and by conducting case study analysis with respect to the financial sustainability of Offinso Health Insurance Scheme, this study has contributed to the available knowledge in the subject area by achieving the research objectives of this work. The author thus feels that the purpose of this research has been achieved. The authors conclude that the Offinso Health Insurance Scheme may not be financially sustainable. Based on the study carried out, it was discovered that generally Offinso mutual health insurance scheme was not adequately funded. This may be due to the fact that the scheme moderately met its target revenue. This may be as result of the scheme inability to generate more funds internally and inadequate government funding. Also, the scheme was not able to meet its claim payments timely. This may be connected to the fact that the scheme was inadequately funded and without adequate funding it would be difficult to meet payments timely. Moreover, the scheme was able to moderately pay its administrative expenses but was not able to undertake capital projects. In generally, the scheme moderately operates surplus budget. From the analysis in chapter four, it was found out that from 2006 to 2011, the revenue figures of the scheme have been growing at a decreasing rate. This confirms the finding that the scheme was not adequately funded. In addition, it was discovered that with the exception of 2009, claims payments have been growing more than the revenue figures. This was as a result of increased cost of operations which were not matching the revenue inflows. It was also discovered that the scheme was suffering from financial distress. Generally the scheme seems to spend about 96 percent of its total revenue on claims payment leaving only 4 percent for overheads and other costs. It was discovered that generally, the scheme has put in place financial defensive strategies. Some of these financial defensive strategies that were employed include the operationalization of consolidated premium account, intensification of clinical audits, the introduction of capitation in Ashanti, the enforcement of gatekeeper's policy, the linking of treatment to diagnosis, and the implementation of uniform prescriptions forms. However, it was also discovered that the scheme was not making use of the mystery shopper technique contrary to the NHIA policy. Generally, the scheme has not put in place measures to ensure prudent management of funds. It was discovered that the scheme does not invest funds to obtain optimum returns. This may be due to the fact that the scheme does not generate enough funds from which it can invest surpluses. The scheme does not have investment research team and does not monitor the investment environment. The scheme was not able to use the prudent financial management strategies tested because the scheme does not control its financial resources. The scheme has not put in place adequate strategies to source for additional funding. In addition, the scheme has not put in measures to collaborate with the NHIA to seek additional funding through policy. The scheme has moderately taking steps to review premium. Even though, the scheme has taken steps to increase it internally-driven fund raising activities, it has not taken steps to seek financial support from development partners. This may be due to the fact that the scheme is not independent from the National Health Insurance Authority in Accra and as such may not be able to source for funds from the development partners independently.

The following are some management recommendations to the operators of Offinsoman health insurance scheme and the National health insurance authority. Firstly, the scheme should look for alternative sources of funding apart from their traditional sources of funding. Some of these alternative sources can include appealing to philanthropist, private businesses, and the Offinso Municipal Assembly. Secondly, the National health insurance authority should put in place measures to ensure the complete decentralisation of the scheme. This will make Offinsoman Health insurance scheme being able to prudently manage its own funds. Also, the scheme can look at undertaking capital intensive projects with higher yields. For example, the scheme can invest some of its financial resources in the hospitality industry, and the financial industry. They can also look into the establishment of their own pharmacy that will supply drugs to its customers. Moreover, the scheme should scrutinize its claim payments to ensure their accuracy. They should institute penalty policy to penalize service providers who over invoice claims. In addition, the scheme should review its defensive strategies to ensure their continuous efficiency. Areas where they fall short should be improved. For example, the application of mystery shoppers as a defensive strategy should be employed. Lastly but not the least, the scheme should increase its internally fund raising activities. The scheme should embark on registration drive to encourage more people to renew and join the scheme. Special registration of identifiable groups exceeding a certain quota may be giving discount.

References

1. Abekah-Nkrumah, G., Dinklo, T., & Abor, J. (2009), "Financing the Health Sector in Ghana: A Review of the Budgetary Process", *European Journal of Economics, Finance and Administrative Sciences*, Issue 17, Pp 45-59, Available online at: <http://www.eurojournals.com>, accessed on 2nd February 2013.
2. Adambe, C. (Undated), "The Thrills and Tears of National Health Insurance Scheme Cardholders in Ghana", University of Ghana, Institute of Statistical, Social and Economic Research, Legon, Accra, Ghana, Pp 1-24.
3. Agyepong, I.A., and Adjei. S. (2008), "Public social policy development and implementation: a case study of the Ghana National Health Insurance Scheme", *Health Policy and Planning Journal*, Vol. 23, No.2 PP 150 – 160
4. Agyepong I.A., Arhinful D., Oppong-Peprah C., Attuah Ntow A. and Baltussen R. (2007), "Research agenda to support national health insurance policy and program development in Ghana", February, MoH, Accra, Pp 6-18.
5. Amarteyfio, I.A, and Yankah, B. (Undated), "Understanding the NHIS Provider Payment System and Capitation", Ghana Health Service and National Health Insurance Authority, Accra, Pp 56-78.
6. Arhinful, D.K. (2003), "The solidarity of self-interest; Social and cultural feasibility of rural health insurance in Ghana", African Studies Centre Research Report 7; Leiden: Printpartners Ipskamp
7. Bani, R. J. (2003). *Micro enterprise development in Ghana*. Accra.
8. Beatie A, Doherty J, Gilson L, Lambo, E., and Shaw. P. (1998), "Sustainable Health Care Financing in Southern Africa", papers from an EDI Health Policy Seminar held in Johannesburg, South Africa, June 1996, EDI Learning Resource Series; Washington DC: World Bank
9. Carrin, G., Doetinchem, O., Kirigia, J., Mathauer, I., and Musango, L. (2008), "Social health insurance: how feasible is its expansion in the African region? *Journal of Development Issues*, Vol. 10, No. 2., Pp 56-76
10. Chuma. J. and Okungu. V. (2011), Viewing the Kenyan health system through an equity lens: implications for universal coverage. *International Journal for Equity in Health*, Vol. 10, No. 22. doi:10.1186/1475-9276-10-22
11. Freedictionary.com (2011), "Insurance", <http://legaldictionary.thefreedictionary.com/insurance+premium>.
12. Freedman P, Waldman J, de Pinho H, Chowdury, M, Rosenfield A (2005). Who's got the power? Transforming health systems for women and children. In *UN Millennium project task force on child and maternal health*. New York: United nations Development Programme.
13. Gilson, L. (1997), "The lessons of user fees experience in Africa", *Health Policy and Planning Journal*, Vol.12, Pp 273-285
14. Gilson, L., and Raphaely, N. (2008), "The terrain of health policy analysis in low and middle income countries: a review of published literature 1994–2007", *Health Policy and Planning*, Vol. 23, Pp294–307
15. Gilson, L., Doherty, J., Lake, S., McIntyre, D., Mwikisa, C., and Thomas, S. (2003), "The SAZA study: implementing health financing reform in South Africa and Zambia", *Health Policy and Planning Journal*, Vol. 18, No.1, p 31-46
16. GOG. (2003), *The National Health Insurance Act: Act 650*. Accra: Government of Ghana.
17. Gobah, F.K., and Liang, Z. (2011), "The National Health Insurance Scheme in Ghana: Prospects and Challenges: a Cross-Sectional Evidence", *Global Journal of Health Science*, Vol. 3, No. 2, PP 90-101, available at www.ccsenet.org/gjhs, Accessed on 2nd February 2013.
18. Griffin, C.C and Shaw, R.P. (1995), "Health Insurance in Sub-Saharan Africa: Aims, findings, policy implications; in R. P Shaw and M Answorth (Eds) *Financing health services through user fees and insurance: Case studies from Sub-Saharan Africa*. Discussion Paper no. 294, Washington DC: World Bank, Africa Technical Department, Pp 203-345.

- 19.HFC Bank. (2004). *World investment news - pre-report Ghana. World Investment News*. Retrieved from, <http://www.winne.com/ssa/ghana/reports/2007/cp/hfc/index.php>
- 20.Ile, I., and Garr, E. (2012), "Financing health care and policy issues in developing countries: Decision making in Ghana's health insurance policy process", *African Journal of Business Management* Vol. 6, No.6, pp. 2375-2383, Available online at <http://www.academicjournals.org/AJBM>, Accessed on 2nd February 2012.
- 21.Jehu-Appiah, C., Aryeetey, A., Agyepong, I., Spaan, E., and Baltussen, R. (2011), "Household perceptions and their implications for enrolment in the National Health Insurance Scheme in Ghana", *Health Policy and Planning Journal*, Oxford University Press in association with The London School of Hygiene and Tropical Medicine, Pp 1-22, Available at: <http://heapol.oxfordjournals.org/>, Accessed on 2nd February 2013.
- 22.Kutzin, J. (2001). A descriptive framework for country-level analysis of health care financing arrangements. *Health policy* Vol. 56. No.3, Amsterdam, Netherlands, Pp. 171-204.
- 23.Lewis, M. (2007), "Informal payments and the financing of health care in developing transition Countries", *Journal of Health Affairs*, Vol. 26, No.4, Pp 984 – 997
- 24.McIntyre, D. (2007). Learning from experience: Health care financing in low-and middle-income countries. *Global Forum for Health Research*.
- 25.Ministry of Health (2009), "Pulling together achieving more. Independent Review", Health Sector Programme of Work 2008. Accra: Ministry of Health, Ghana. Pp 35-65
- 26.National Health Insurance Authority. (2010), "Financial implications to achieving the MDGs: How to Meet the Costs", *NHIA Presentation at Health Summit*, November, 2010, Accra.
- 27.National Health Insurance Authority. (2010), "National Health Insurance Scheme", Annual Report 2009. Accra.
- 28.National Health Insurance Authority. (NHIA). (2008), "Providing Free Maternal and Neonatal Health care through NHIS.", *NHIA Presentation at Health summit*, November 2008. Accra.
- 29.Offinsoman Health Insurance Scheme (2011), "unaudited Financial Statement", unpublished.
- 30.Preker, A.S, and Carrin, G. (2004), "Health financing for poor people: Resource mobilization and risk sharing", 2004 Edn, The World Bank, Washington, D.C., Pp 34-45.
- 31.Seddoh, A, Adjei, S., and Nazzar, A. (2011), "Ghana's Health Insurance Scheme: Views on Progress, Observations and Commentary", Centre for Health and Social Services, The Rockefeller Foundation, Pp 2-104.
- 32.Wagstaff, A., and Moreno-Serra, R. (2009), "Europe and Central Asia's great post-communist social health insurance experiment: aggregated impacts on health sector outcomes", *Journal of Health Economics*, vol. 28, Pp 322-340.
- 33.United Nations Industrial Development Organization (UNIDO) (2002). Rural Enterprise Development Support Project. Entrepreneurial Skills for group based SMEs . Trainers Manual. Accra
- 34.Witter, S. and Garshong, B. (2009), "Something old or something new? Social health insurance in Ghana. *BMC International Health and Human Rights*, Vol. 9, No. 20. Pp 96-109, [Online] Available: <http://www.biomedcentral.com/1472-698X/9/20>, accessed on 2nd February 2012
- 35.World Bank, (2004), "Memorandum of the President of the International Development Association and the International Finance Corporation to the Executive Directors on a Country Assistance Strategy of the World Bank Group for the Republic of Ghana", February 20, Pp 245-360, Available at: www.worldbank.org/GHANAEXTN/Resources/CASGhana.pdf, Accessed on 2nd February 2013.
- 36.World Health Organization. (2000), "*The World Health Report 2000*. Health systems: Improving performance", World Health Organization, Geneva.
- 37.World Health Organization (2005), "Fifty-eighth World Health Assembly Summary Record of Committees", May 16-25, 9th Plenary Meeting, Committee 'A' report; WHO, Geneva, Pp 203-265.
- 38.World Health Organisation (2006). Health Financing: A strategy for the African Region. WHO Regional Office for Africa.
- 39.World Health Organisation, (2010), "Technical Barriers for Policy Makers: Obstacles in the process of establishing sustainable National Health Insurance Scheme: insights from Ghana", Department of Health Systems Financing Health Financing Policy, World Health Organization 2010, Geneva, PP 1-6
- 40.Xu, K., Evans, D., Carrin, G., Aguilar-Rivera, A. M., Musgrove, P., and Evans, T. (2007), "Protecting households from catastrophic health spending:", *Journal of Health Affairs (Millwood)*, Vol. 26, Pp 972-983. Available at <http://dx.doi.org/10.1377/hlthaff.26.4.972>, accessed on 2nd February 2013

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Kofi Owusu Yeboah (BA'2004-MBA'2010). He was born at Acherensua in the Brong Ahafo Region of Ghana on 31st January 1981. He has obtained the following educational qualifications: Senior High School Certificate (business studies) at Sunyani Senior High School, Sunyani, Ghana, 1998; Bachelor of Arts (political science with philosophy), University of Ghana, Accra, Ghana, 2004; Ghana Stock Exchange Securities Course (portfolio management and investment analysis), Ghana Stock Exchange, 2005; Institute of Chartered Accountants-Ghana (part-qualified), Ghana, 2009; Chartered Institute of Bankers (final level), Ghana, 2009; Association of Chartered Certified Accountants (final level), UK, 2010; and MBA (marketing), Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana, 2010. Mr Kofi Owusu Yeboah is a Lecturer of Spiritan University College, Ejisu, Ashanti, Ghana, Part-time Teacher Ideal College, Boadi, Kumasi and also a Private Research Consultant. He has worked with Ghana Education Service as History and Government Teacher (December 2005-September 2006), Ministry of Youth and Sports as Ejisu-Juaben Municipal Youth Employment Coordinator (October 2006-November 2009), HFC Bank Ghana Ltd as Intern (May 2011 – July 2011), Meridian Pre-University, Kumasi, Ghana as Lecturer (August 2011-May 2012), and Prime Motors Ltd in Kumasi, Ghana as Finance and Administration Manager (May 2012-October 2012).

Moses Kormedoda (BSc'-MBA'2013). Mr Moses Kormedoda was born on 16th June 1965. He obtained his: Teachers Cert "A" at Offinso Training College, Offinso, Ghana, 1992; O'Level certificate at Nungua Senior High School, Nungua, Accra, Ghana, 1996; A-Level certificate at Workers College, Kumasi, Ghana, 1997; HND (accountancy) from Tamale Polytechnic, Tamale, Ghana 1999; Bachelor of Science in Administration (accounting with computing), Garden City University College, Kenyasi-Kumasi, Ghana, 2010; and MBA (finance), KNUST, Kumasi, Ghana, 2013. He is currently the Municipal Accountant of Offinso Municipal Health Insurance Scheme. He has taught English, Mathematics and Social Studies in a number of basic schools including Bawa Barracks Junior High School (JHS) at Tamale, Tijo JHS also in Tamale (1993-1997) and Duasi JHS in Kumasi, Ghana (1998-2004).

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