Debunking the Myth of the Voluntary Privatized Defined Contribution Pension Model

A Case Study of the Old Age Savings Strategies and the New Pension System for Informal Workers in Ghana

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Contents

List of Tables

List of Figures

List of Appendices

List of Acronyms

DC	Defined Contribution
IFI	International Financial Institution
ILO	International Labor Organization
IMF	International Monetary Fund
ISF	Informal Sector Fund
ISS	Informal Sector Scheme
LEAP	Livelihood Empowerment against Poverty
NPRA	National Pension Regulatory Authority
NTHC	National Trust Holding Company
PAYG	Pay-as-you-go
SSNIT	Social Security and National Insurance Trust
TUC	Trade Union Congress of Ghana

Abstract

This paper is an analysis of the new pension system for the informal workers in Ghana. Since 2005, Ghana has started to implement a public voluntary defined contribution pension system in Ghana which turned to a fully privatized scheme in 2010. According to the logic of the international financial institutions, this pension model is believed to be a suitable pension solution for developing countries. However, the take up rate of the system is just about 1% of the informal workers population after more than 9 years of implementation.

This research finds that because of the institutional constraints, this system cannot be accessed by most of the informal workers and it is the direct cause of the low take up rate. This research further argues that there is system failure in the new pension system. On one hand, the system overlooked the fact that the existing old age saving strategy of the informal workers has already provided them an effective high-risk high-return investment opportunity. On the other hands, with low institutional capacity, the privatized defined contribution model cannot provide a low risk pension with basic pension. These findings can be considered as a counter argument to the privatized defined contribution pension model recommended by the international financial institutions and suggests that a tax finance public pension maybe a more feasible pension solution in developing countries with similar socio economic background with Ghana.

Relevance to Development Studies

The voluntary privatized defined contribution model has been diffused by the international financial institutions as an appropriate solution of the old age income protection problems to many developing countries This research evaluates the effectiveness of this model to be implemented in Ghana. The findings of this research debunk the underlying logics embraced by the proponents of this mode and should be an important reference for other developing countries with similar socio-economic of Ghana and undergoing similar pension reform.

Keywords

Ghana, Pension, Three Pillar Model, Privatization, Defined contribution, Institutional capacity, International financial institutions, Policy diffusion

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Buck up. Never say die! We'll get along!

Chapter 1
Introduction

Since the 90s, the privatized defined contribution (DC) model has been adopted within the pension system of many countries, especially developing countries. Promoted by international financial institutions (IFI), like the IMF or World Bank, this model is claimed to be an appropriate solution for countries where people do little old age savings and the government lacks of capacity. Ghana has started to apply such pension model to informal workers since 2005 (It was first adopted as a public system and then is gradually transformed to a privatized system). This paper is to study effectiveness of this new pension system.

Ghana has been undergoing rapid social and economic transition in recent years and the traditional old age support system is considered to be eroding (Aboderin 2004). Although a public pension system has been established since the colonial period, it only supports civil servants and formal workers, but leaves the informal workers, who comprise more than 80% of the Ghanaian labor force, unprotected. In 2005, a pilot pension scheme for informal workers, called the Informal Sector Scheme (ISS) was launched and it changed to the Informal Sector Fund (ISF) in 2008. In 2010[1], a new three tiers pension system was implemented to extend pension coverage of the informal workers. This can be considered as the government's response to the new challenges faced by Ghana in term of old age income protection (Orenstein 2005).

The new pension scheme has adopted the voluntary DC model. It is evolved from a public DC system in the ISS in 2005, to a semi private DC system in the ISF in 2008 and to a fully privatized system in the third tier pension in 2010. The privatized DC model has been promoted by IFIs to the international community since the 1990s as a solution to the old age income protection problem and since then has been diffused to many countries (particularly developing countries) (Brooks 2005, World Bank 2008, Singh 1996, Orenstein 2005). After examining and analyzing the problems faced by the developing countries, proponents of this model have pinpointed two main arguments in support of such model. Firstly, people in developing countries practice little old age savings. As a result, a DC system can encourage (or force) people to save for their old age. Secondly, developing countries do not have the government capacity to manage a public pay-as-you-go (PAYG) pension system, so a privatized DC system will keep the government small; giving individual more

[1] As the Act of the three-tier pension system is passed in 2008, the pension reform is called 2008 pension reform, although the three-tier pension system is actually implemented in 2010.

control to their pension and leaving the pension to be managed by the more efficient private sectors (Casey and Dostal 2008; Singh 1996). A privatized DC system can be mandatory or voluntary in nature, but as the income of the informal workers is difficult to be tracked, it can only be voluntary if it is targeted to informal workers. It is believed that such pension system is an appropriate policy option to enhance the old age income protection for the informal workers in Ghana.

However, since implementing the ISS in 2005, statistics shows that only about 1% of the informal workers in Ghana have enrolled in the new pension system. It seems that the new pension system failed to function as promise. As pension reform in Ghana is revealed to be influenced by a long process of policy diffusion (Kpessa 2013) and this is often an interest driven and ideological laden process (Leimgruber 2012), it is reasonable to wonder if actual constraints and the needs of the country have been taken into consideration during the decision making process, and it is questionable whether the new pension system can really enhance the old age income protection of the informal workers in Ghana.

This paper asks why the new pension system has had so little take up rate within the informal workers, on this basis, whether it offers a realistic approach to enhancing old age income protection for informal workers in Ghana. Is it because of the misconception of the savings behaviors of the workers, or the design of the system, or its implementation, or something else?

In order to analyze these questions, this research has focused in particular on the savings practices of informal workers in Ghana, with the intention to explore whether they really do not practice long term old age savings, or if they do, through what strategies; and also to explore the effectiveness of the new pension reform in enhancing the income protection of the informal workers in addition to their existing savings strategies.

The argument of this paper is that institutional constraints leads to the failure in building an accessible pension system both in term of information and service delivery. Such informational inaccessibility is the direct cause of the low take up rate of the new pension system. However, this research further argues that there is system failure in the new pension system for enhancing the old age income protection of informal workers even if it is accessible to them. On one hand, proponents of this system fail to perceive the fact that informal workers have already had a high-risk-high-return savings strategy. On the other hand, due to the institutional constraints, the voluntary privatized DC system cannot provide a low risk instrument that pay basic income to people's old age. Two implications can be drawn by the findings. First, it shows that informal economic practices can be overlooked by the policy makers, so replacing them with formal financial institution does not necessarily produce better result. Secondly, without the support of institutional capacity, a privatized social protection system will not be functioned effectively. In sum, it debunks the myth that the voluntary privatized DC pension model to be an appropriate solution of pension reform in the developing countries.

This research is an evaluation of the pension reform in Ghana, but many other countries facing similar condition have also been undergoing through similar reform advocated by the IFIs in the past three decades, thus this research is significant in re-examining the underlying arguments that support the implementation of the privatized DC model in other developing countries.

This paper is divided into seven chapters. Following the introductory chapter, the second chapter explains the methodology adopted in this research. The third chapter is the literature review that focuses on the old age savings strategies of the people in developing countries, and the debate on the voluntary privatized DC model. Chapter four outlines the background of the research, while basic socio-demographies of the elderly people and the informal workers of Ghana are introduced. It also provides a basic mapping of the old age income protection and the trajectory of the development of pension system in Ghana. Chapter five and six highlights the main findings of the research. Chapter five focuses on whether informal workers in Ghana practice any old age savings and what are the savings strategies they have adopted. Chapter six evaluates the effectiveness of the new pension system in enhancing the old age income protection of the informal workers. Chapter seven concludes the analysis and findings of this study, with the discussion on the possible ways of developing the Ghana pension system.

Chapter 2
Methodology

In order to examine the savings strategies of the informal workers in Ghana and the impact of the pension reform, we have to study the dynamics of the savings behaviors of people, the implementation of the pension system, as well as the macro socio economic situation where the pension system is embedded. Therefore, a mixed of qualitative method and secondary data analysis has been chosen for this study. Data is obtained from in-depth interviews, government documents and government statistics.

Targets of the interviews include informal workers (plus two formal workers for complementary information) and elite group who are related to the implementation of the new pension system. Government documents, including legal documents, guideline of the new pension system and promotional materials have also been studied in details. In collecting government statistics, socio-demographic data have been obtained from the Ghana Statistical Service and economic data obtained from the Ghana Central Bank.

2.1 Logic of Case Selection

According to the definition adopted by the 17th International Conference of Labor Statistics, informal worker is defined as 'person employed in informal sectors' and 'persons in informal employment outside the informal sector.' (United Nation 2010: 88). The former category includes the self-employed workers, employers, employees, family workers and members of cooperatives working in informal enterprise. The latter category mainly includes those employees or domestic workers working in formal enterprise but are not protected by the national labor legislation or covered by employment benefit (ibid.). For simplicity, this research adopts a practical approach for the operational definition of informal workers as those workers who are not covered by the formal worker pension (the first and second tier pension) under the Pension Act 766. This includes business owners, self-employed individuals, and employees who are working in a business setting with less than 5 employees.

As this study needs to articulate the causes of the low take up rate of the new pension system, the "Disconfirmatory (Most Likely) Crucial Case Technique" is used to select the cases of the informal workers. According to Gerring (2007:135), a disconfimatory crucial case is 'one that, on all dimensions except the dimension of theoretical interest, is predicted to achieve a certain outcome, and yet does not'. It means that the logic of this case selection technique is to explain why certain outcome does not occur even when the case has all the attributes that, according to the theories, should result in such outcome. Previous studies shows that people with lower age, higher education and higher income tend to find micro pension program useful to them(Collins-Sowah et al. 2013), and it is difficult for the financial institutions to implement pension program in remote area(Stewart and Hu 2009). As a result, this research will focus on the informal workers in Accra who have not joined the new pension, excluding those who are with monthly income lower than 260GH₵ per month, educational attainment lower than junior secondary and older than 50[2], as the cases to be interviewed. They are the group most likely to find the new pension system to be useful for them, and if even they do not participate in the new pension system, it will highlights the underlying problems in the pension system that lead to the low take up rate.

The elite interviewees, the government document and the statistics are supposed to provide information about the new pension system as a whole. These data will be cross-checked with the data obtained from the informal workers to analyze how far the pension system is effective to enhance the old age income protection of this group of informal workers.

2.2 Sampling Method and Result of Sampling

Informal workers are sampled by snow ball sampling. The sampling process begins with several key informants and they were asked to refer any other workers they thought to have fulfilled the sampling criteria. Purposive sampling is used for selecting the interviewees representing the elite group,. Targeted institutions were listed and invitation was sent for interview with their representatives

16 interviews of informal workers and 7 interviews for the elite group are conducted. Two with formal workers are also conducted to obtain complementary information which provides further insight to the analysis.

For the informal workers, 13 of them are male and 3 are female. All except two are with income higher than 260GH₵[3] per month and all are with educational attainment equal to or higher than junior secondary. For the age level, all are within the age group of 20 to 49. For occupation, 6 of them are running their own business, 7 are self-employed and 4 are employees[4] (Table 2.1a-

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[2] The thresholds are set based on the following rationale: average monthly income of workers is about 257GH₵ per month (Calculation is shown in Chapter 4), about 59% of the population are with educational attainment lower then Junior Secondary, and 50 is 10 years before the official retirement age.

[3] Two interviewees have h income lower than 260 GH₵ is because no interviewee who falls into the employee category is available during in the first stage of the interview. In the second stage, employees are recruited purposefully but only people with relatively low income can be successfully contacted.

[4] One interviewee is part time self-employed, part time being employees

Table2.1d). For the elite groups, one interviewee is the manager of the National Pension Regulatory Authority (NPRA), while another is the manager of the ISF, Two interviewees are managers of the private trustees (one interviewee is from the National Trust Holding Company (NTHC), and the other one is from PETER). The other interviewees are the member of the Pension Reform Commission, the manager from a savings and loan company (Big World[5]) and the representative of the trade union respectively (Trade Union Congress)(Appendix 1)

Table 2.1a Gender of the Informal-Worker Interviewees

Gender	Quantity
Male	13
Female	3

Table 2.1b Income of the Informal-Worker Interviewees

Income Range	Quantity
Less than 260GH₡	2
260GH₡ -499GH₡	5
500GH₡-1000GH₡	5
1000GH₡ or above	2
Unknown	2[6]

Table 2.1c Educational Attainment of the Informal-Worker Interviewees

Education Attainment	Quantity
Junior Secondary	7
Senior Secondary/ Technical Diploma	8
Unknown	1

Table 2.1d Occupation of the Informal-Workers Interviewees

Occupation	Quantity
Business Owners	6
Self Employed	7
Employees	4

Source: Data from this research

All the interviews were conducted face to face following a structural interview guideline (Appendix2). Most of the interviews were conducted in English with a few conducted in local dialects with the assistance of a local interpreter. All interviews except 3 were audio recorded and transcribed. Managers of PETER, Big World, and NPRA agreed to be interviewed if the process was

[5] As the managers want to keep the name of the companies to be anonymous, fake name like PETER and Big World are used

[6] The two interviewees with unknown income only report how much their monthly savings of 300 GH₡ and 100 GH₡. It is reasonable to believe that their income would be more than 260 GH₡ per month

not audio recorded. Thus in these interviews, detailed interview notes are taken. For the interview with the manager from NPRA, a written response of some of the interview questions was sent to the researcher a few days following the interview.

3.4 Gender, Class Dynamic and Limitation of this research

The result of the snow ball sampling of the informal workers is male biased. It may lead to a gender biased analysis. However, analysis of the interview data does not show any systematic difference in savings strategies and perception to the new pension system between the male and female. A specific question is also added to investigate the interviewees' perception on the gender difference in old age savings. All the interviewees believed there is no big difference in general. Some of the interviewees revealed that women sometimes save more than men, but they also suggested gender difference is insignificant.

This research also excludes the low income informal workers in case selection. As previous studies have already showed that micro pension is not useful for people with low income, class should be an important variable determining the effectiveness of a pension system. However, as mentioned in the previous section, the logic of case selection in this research only focuses on the "most likely case", class analysis is purposefully neglected in this research

One major weakness of this research is that almost all the interviewees have never heard of the new pension system. In the original planning of the research methodology, it is expected that the interviewees will explain to what extent the new pension system is useful for them. However, during the process of interview, all the interviewees showed that they did not know any details about the new pension system. In fact, this situation reflects the problem of low accessibility of the system and this is the direct causes of the low take-up rate (will be discussed on Chapter 6). However, if interviewees have no knowledge about the new pension system, it is impossible for them to judge whether the new pension system will enhance their old age income protection. To solve this problem, hypothetical question (for example: if there is a pension system like that, do you think it would be useful?) is asked to them to find out which type of pension they think to be most beneficial to them and their answer will be cross checked with the implementation of the new pension system.

As the informal workers interviewees in this study is not sampled based on probability sampling, this research cannot deduce how far the findings can be generalized to other informal workers in Ghana. It means that this research should only be considered as an exploratory study.

Chapter 3
Literature Review

This paper explains the low take up rate of the new pension system and analyzes whether the voluntary privatized DC pension model can enhance the old age income protection of the informal workers in Ghana. To answer these questions, this chapter will examine the rationales of the IFIs in supporting the voluntary privatized DC model. It will then review how these rationales are addressed in the current academic debate.

3.1 Privatized Defined Benefit Pension and Old Age Income Protection

The voluntary privatized DC model adopted for the informal workers in Ghana can be categorized as the third-pillar in the three pillars pension model. The three pillars model was adopted and promoted by the World Bank since the report, "Averting the Old d Age Crisis" published in 1994. The three pillars model consists of a defined benefit state pension as the first pillar, a mandatory DC pension as the second pillar and a voluntary DC pension as the third pillar (World Bank. 2008).

One of the main rationales of promoting a DC system (no matter it is voluntary or mandatory, public or private) is to provide the institutional structure to force (in a mandatory program) or encourage (in a voluntary program) people to save for their old age, because people (especially in developing countries) are believed not to have enough old age savings. In the Averting the Old d Age Crisis report, insufficient savings is diagnostic as the main problem to be tackled in an old age income protection system. For example, in the report, among the five arguments to the need of government intervention in old age income protection system, three of them are related to insufficient savings. They are: short sightedness of the people, inadequate savings instrument and information gaps. To tackle the above problems, a DC system will encourage (force) people to make long term savings choices; provides instrument of savings; and provide a platform to bridge the information gap (World Bank 1994). As a result, this system will be beneficial to both individuals as it helps people to prepare for their old age, and the society as it provides scarce capital for development. (World Bank. 2008, Singh 1996).

Another motive to adopt the DC system is the lack of state capacity. In the Averting the Old d Age Crisis report, significant portion of it focuses on the inefficient of the public pension system. For example, it debunks the "myth" that 'individual are myopic but government take long view' by stating that the 'governments have repeatedly made decision about old age program based on short run exigencies' (World Bank 1994: 11). It also argues that a government running a PAYG pension has high chance to lose their financial discipline, which in turn induces high risk of unsustainability of the pension system.

Throughout the report, it explains how certain role of the public PAYG pension system can be replaced by a DC system. Although a DC system can be publicly or privately managed, the IFIs shows preference on the privatized solution as the private financial institutions is believed to be more efficient to achieve high investment return and low administrative cost (Singh 1996).

As it is difficult to track the income of the informal workers, according to the World Bank framework, pension system targeting for informal workers can only be either in the form of non-contributory public pension (first pillar) or the voluntary DC pension (third pillar) (World Bank 2008). Although the World Bank are supposed to give equal footing to each of the three pillars on paper, Kpessa (2013) and Orenstein(2005) argues that it is the second and third pillar being actually advocated by the diffusion process of the three pillars model. It means what IFIs actually recommend to be the pension system for informal workers is the voluntary DC pension model.

Some scholars argue that such process of policy diffusion is driven by ideology and interest of the international players rather than by the real concern of the problem faced by the countries (Kpessa 2013). For example, Leimgruber (2012) points out that the promotion of the three pillars metaphor was first introduced to the international community by Swiss insurance companies in the1970s. These companies had a clear agenda of expanding the private insurance businesses. Kpessa‘s research (2013) on the pension reform in Nigeria and Ghana suggests that although IFIs did not have direct influence during their debate in pension reform, he argues that as IFIs had already had a long history of engagement in the development of these two countries, the IFIs' ideology has already been internalized to the decision makers of these two countries.

If Ghana's pension reform is determined by ideological or interest driven policy diffusion, one should question whether the new pension system can truly respond to the actual socio-economic situation. As a result, the two underlying logics in adopting the voluntary privatized DC model should be put under further analyzed.

3.2 Do People Save for their Old Age in Developing Countries?

According to the classical life cycle savings hypnosis (LCH), people make their savings and consumption decision based on their lifelong expected income so as to maintain the same consumption level in their whole life. As a result, people tend to save more in their productive age and have dissavings when they are old (Modigliani 2005). From a consumption smoothing perspective, in the traditional old age support system, the need for old age savings would be lower as the consumption of the productive age people is restricted by their duty and responsibility to support the elderly, while the consumption of the elderly people is enhanced by inter-generation financial transfer. As a result, the World Bank (Zia and Webb 1989) predicts that under the demographic change and the collapse of extended family in developing countries, the savings behavior of the people will follow the classical LCH and the savings rate will increase.

However, some researches argue that people in the developing may not show this kind of economic rationality and have stronger preference in current consumption. According to the research of Poulos and Whittington (2000) in 6 developing counties, people in developing countries are more impatient than their counterparts in the developed countries. While the discount rate of the USA is about 17% for 5 years period, it ranges from 38% to 45% in the selected developing countries. Some scholars regard this difference of time preference as proof of irrationality or uncivilized culture of the people in the developing countries. This can be best demonstrated by the statement made by Lord Lugard in 1926. It claimed: 'typical African of this race-type is a happy, thriftless, excitable person, lacking in self-control, discipline and foresight' (Quoted form Easterly 2013). Although recent researches are less likely to adopt such cultural deterministic approach, time preference is still a key factor to explain the savings behavior in the developing countries (Dupas and Robinson 2011). For example, the self-discipline model suggests that poor people are more impatient to save because their loss from not consuming the "temptation good" is higher than the rich.

Other scholars argue the low level of long term savings in developing countries should be attributed to more structural factors. Deaton(1989) states that the under development of the financial institution will discourage poor people in developing countries from savings. The in-attention model suggests that people in developing countries would like to save but they cannot enforce their savings intention because getting limited access to savings instruments will make them in-attend to their savings intention (Dupas and Robinson 2011).

The above studies show that even though social and economic transition generates the need for long term savings, people in developing countries are perceived to save too little. This explains why it will be beneficial to people for a DC pension system to force, encourage or facilitate them to take "rational" savings action

Savings through the Informal Financial Mechanism

While mainstream economics argues that people in developing countries do not save enough for their old age, Polly Hill (1986)'s study shows that people in developing countries do save but by other mechanism that is not captured by the framework of mainstream economics. Hill argues that the concepts in mainstream economics, like income, savings, investment or households, may be irrelevant to analyze the behaviors of people in developing countries and it will omit some important dynamics in their economic behaviors. For example, in her analysis of the migrant Coca farmer in Ghana, it found that the farmers saved by buying far more land than what could conceivably be cultivated in the coming future because they considered the land as a 'reliable savings banks' (Polly 1986: 136).

Other studies reveal that savings and borrowing activities are actually very common in developing countries but are operated within informal financial institutions. The informal financial institutions relating to savings include: rotating savings and credit associations (ROSCA), accumulating savings and credit associations (ASCA) (or called savings and credit cooperatives (SCC)) and individual savings collectors (Aryeetey 2005, Nhongo 2013, Oduro 2010).

Research indicates that these informal financial institutions can be even more efficient than the formal ones. It is shown that the administrative cost and the delinquent rate for loan of informal financial institutions is lower than that of formal institutions. This high efficiency can entirely attributed to its informality: its flexibility in handling delinquent avoidance and the use of personal relations in clients' selection (Steel et al. 1997).

One should note that current literatures on the role of informal financial institution in developing countries mainly focus on credit provision. The function of informal financial institutions as an instrument of savings has been underplayed. Furthermore, according to the "Report on the Development of Long Term Savings Instruments in Ghana", all these informal financial institutions cannot facilitate long term savings and hence long term savings instrument is still absent for the people of Ghana(Sigma One Corporation 2003).

3.3 Is the Voluntary Privatized DC Pension a Better Policy Option?

Although proponents of the privatized DC system consider it to be efficient and can reduce the risk of mismanagement by the government, many scholars questions whether it is a better policy option than a defined benefit public pension (Orszag and Stiglitz 2001).

Besides shifting the pension management choice from the government to individuals, Singh (1996) suggests that a privatized DC system also shifts the financial risk from the government to individuals. Under a privatized DC system, the final pension benefit people get is subjected to market fluctuation (Bodie et al. 2001, Singh 1996). It also does not contain any income redistribution mechanism. It means that poor people can only extend their misery situation to their old age (Orenstein 2005).

Although in a privatized DC system, there is no risk of government default in fulfilling their pension promise, people are subjected to the default risk of the private financial institution. This problem is more prominent in the developing countries whereas the financial system is not well developed (Singh 1996, Casey and Dostal 2008). Furthermore, using privatized financial institutions to run the pension can lead to higher administrative cost that will lower the pension benefit of the participants. For example, research shows that the administrative cost of privatized pension scheme can reduce the entitlement of the pension benefit up to 40% in some countries (Hernandez 2008). Also, the idea that competition will bring the administrative cost down has not realized in many countries. Tapia and Yermo (2007) argues that price mechanism cannot function properly in this kind of pension programs, because people are overloaded with too much information and cannot make rational choice based on price signal.

Gough argues that the welfare state model assumes a well-functioning state and institution. As he explains, 'A welfare state regime reflects a set of conditions where people can reasonably expect to meet (to a varying extent) their security needs via participation in labour markets, financial markets and the finance and provisioning role of a welfare state'(Gough et al. 2004 :31). In contrast to the neo-liberal doctrine argues that market is the best solution when government capacity is low, in Gough's analysis, even the liberal regime, where market is widely used for welfare provision, cannot be functioned without state and institutional capacity. Even the World Bank in their latter report suggests that countries with underdeveloped institution should not adopt the privatized pension pillar. (Casey and Dostal 2008: 192, World Bank 2006).

The privatized DC model is expected to be more problematic if targeting to informal workers as it has to been implemented in a voluntary basis. Informal workers usually have unstable income (hence unstable contribution), so that it will further deepen the problem of volatility in the benefit level. Many developing countries, including India, Vietnam, Kenya, Malaysia and South Africa, etc., have implemented such voluntary DC pension system to the informal workers in recent years (Stewart and Hu 2009, Nhongo 2013). Although result varies in different countries, in general its effectiveness is not satisfactory (Stewart and Hu 2009).

If a voluntary DC pension system is not effective to provide old age income protection to the informal workers, setting a public pension financed by general revenue may be the best way to provide basic protection to the elderly people in the developing countries. Countries like Bolivia, Botswana, Nepal, India, Thailand, South Africa, Namibia have adopted such strategy (Stewart and Hu 2009). State pension can be universal or mean tested. Although such pension is always criticized to be too expensive under the fiscal constraint of the developing countries, a study shows that even the implementation of a universal pension in general costs less than 2% of the GDP in the developing countries (Knox-Vydmanov 2012). The research of ILO suggests that instead of budget constraint, the key determinant of many developing countries for expanding the fiscal space of social protection program is the political commitment (Durán-Valverde and Pacheco 2012). It means that such a tax financed defined benefit state pension system should be administratively and fiscally feasible to many countries.

Summary

The above literature review shows that in response to the need to enhance the old age protection system, one of the solutions promoted by the IFIs and adopted in many countries (including Ghana) in recent years is the privatized DC model. This model is claimed to cater the problem of low savings and low of government capacity. However, other studies argue that this pension solution is diffused by interest and ideological driven motivation of the IFIs and does not truly response to the real need of the countries. On one hand, informal savings behavior may have been overlooked by the proponents of the privatized DC pension model. On the other hand, this model is criticized to leave too much risk to individual and cannot function effectively without the back up of good institution. As informal workers usually have unstable income and this model has to be implemented in voluntary basis, their unstable contribution makes this model especially unsuitable to meet the old age income protection need of informal workers.

Analyzing the savings behaviors of the people and the effectiveness of a pension system involves digging insides the dynamic in the daily economic practices. It means these questions cannot just be answered by reviewing different studies. This paper will go into these dynamics to find out whether the new pension system can really enhance the old age income protection of the informal workers and how the low take up rate of the system can be explained.

Chapter 4
Background of the Pension Reform

4.1. Demographic Structure and Projection

The elderly (aged 60 or above) population of Ghana is about 1.6 million in 2010. It accounts for about 6.7% of the 24.7 million population. Although the population of Ghana is relatively young, the proportion of elderly people has significantly increased compared to 1960 (4.7%). Literatures suggest that there is a trend that children live separately with their parents (Aboderin 2004, Apt 2002), but there are still on average 1.4 working age people living in the same household with their elderly household head[7](Ghana Statistical Service 2013a, Ghana Statistical Service 2008, Ghana Statistical Service 2013b).

With the decline in fertility rate and the increase in life expectancy, the demographic structure of Ghana will be aging in the future. The peak of the fertility rate in Ghana was 7.0 in the 1965-1970 period, which later declined to 4.2 in the 2005-2010 period. It means that the current elderly population will be the cohort with the largest number of children ever born and this number will decline subsequently (United Nation Population Division. 2012). This is expected to weaken the income support that the elderly people can get from their children.

4.2. Socio Economic Condition of Informal Labor

According to the national statistics service(Ghana Statistical Service 2013a), about 86% of the labor force in Ghana are working as informal workers. There is no specific statistics of the monthly income for informal workers. Latest statistics about the income level for all the workers obtained from 2005/2006 showed that the average hourly wage was 0.55GH₵(Ghana Statistical Service 2008). A rough estimation of the average monthly salary based on this figure should be about 257 GH₵ per month in 2014[8].

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[7] This proportion of elderly people living in elderly headed household is quite the same in rural and urban area. The difference is less than 5%.

[8] As the real GDP has increased by a factor of 1.33 from 2008 to 2013 and the inflation has increased by a factor of 2, the average hourly salary should be adjusted by a factor of 2.7. As the median working hour is about 40 per week, the monthly income is calculated by 0.55GH₵x2.7x40x52/12. As the salary does not necessarily increase in the same rate of inflation and GDP growth and no statistics about the salary level and working hour is available, the estimation is only the best guess from the available statistics.

4.3. Income Support of Elderly People in Ghana

Main sources of income of the elderly people in Ghana include family support, income from work, savings (including income generated from asset), public pension, and support from social assistance. A rough estimation of the coverage of each income source is summarized in figure 4.2.

Family Support

According to the research of Aboderlin(2004) , family, kinship and family support tended to be the predominant method of elderly livelihood support[9] in Ghana in the past. Especially for adult children, obligation to provide support to their parents was considered to be part of the "customary moral code". This bonding between the parents and the children has not weakened even after the children get married (Apt. 2009).

However, recent studies argue that children support to parents has been largely eroded in the recent years. (Aboderin 2004, Collins-Sowah et al. 2013, Apt 2002). Some scholars suggest that Ghana is undergoing a modernization process leading to 'the weakening of traditional extended family and filial obligation' (Aboderin 2004: 129). Other scholars argue that although emotional bond between the children and their parents are still strong in Ghana, the political economic transition has led to the decline in old age support to parents. For example, the monetization of the economy makes supporting elderly people more costly and difficult in Ghana (Apt. 2009, Apt 2002).

There is no government statistics about the family support given to the elderly people. According to a survey conducted in 1992, more than half (55.4%) of the elderly people were dependent on the support of their children, 9.2% on their spouse, 8.2% on their other relatives (Brown 1999). It means that kinship support (children + spouse + relatives) account for the income support for about 60%-70% of the elderly population. However, it should be noted that this research was conducted 20 years ago and income support from children and family is believed to be declining. The current statistics of income support from family should be lower.

Income from work

According to government statistics) (Ghana Statistical Service 2013b), about 58.5% of the population over 60 is economically active. The older the elderly population is, the lower proportion of elderly population is economically active (from 74.4% for the 60-64 years old to 38.5% for the 80 or older). This trend has become more obvious if compared the past 10 years (Figure 4.1. It means

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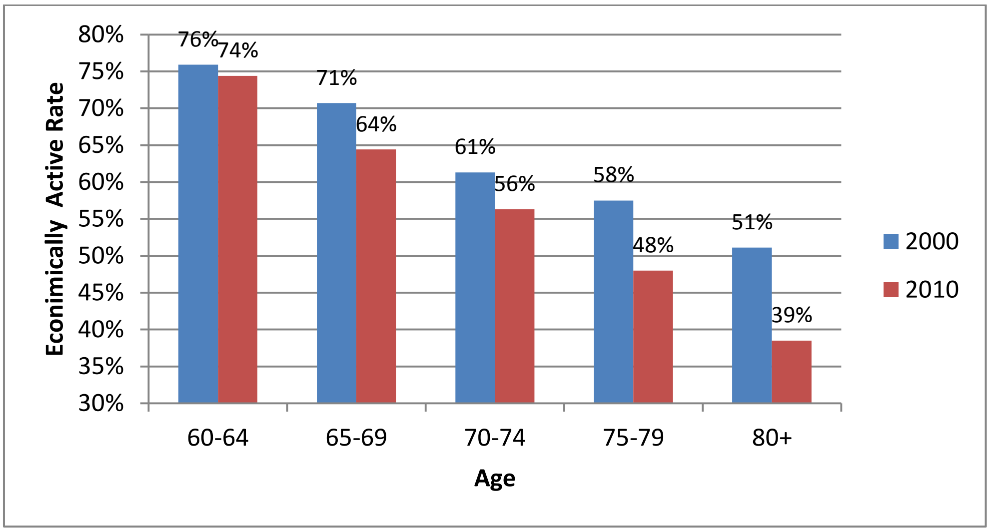
[9] The children, kinship and community support to the elderly people are not necessarily in the form of income. In the five pillar pension model of the World Bank, non-monetary income support is included in the fourth pillar.

that it is more difficult for the "older" elderly people to obtain income from work in recent years.

Figure4.1 Economically active rate by age (2000,2010)



Source: Ghana Statistical Service 2013b

Personal Savings

For personal savings, there is not any statistics about how much personal savings or investment income the elderly people have in Ghana. According to the Global Financial Inclusion Database (World Bank 2011), about 40.7% of the adults (25 or older) have saved money in the past year, but whether the savings is long term or short term is largely unknown. Other data that may be relevant to the asset of the elderly people in Ghana is the ownership of dwellings. Government statistics show that about 28.9% of the elderly population are the owners of their dwellings (Ghana Statistical Service 2013b).

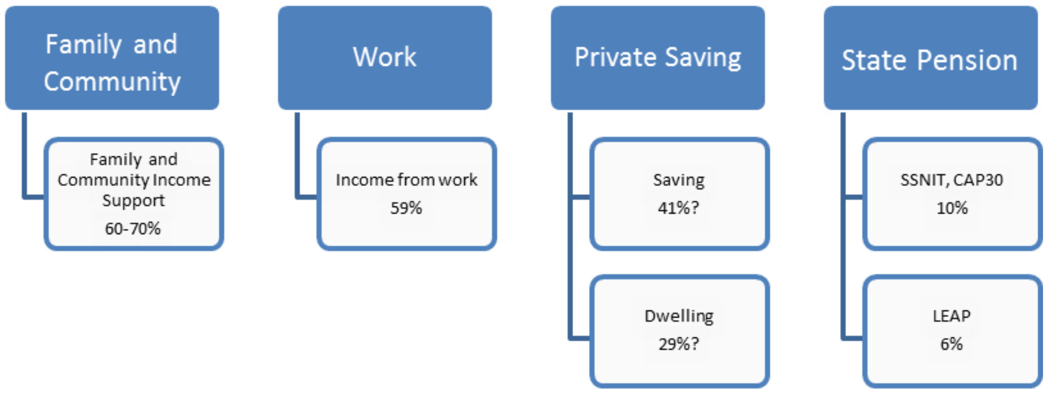
Public Pension

For public pension, according to the annual report of the SSNIT (SSNIT 2012), there are 112,522 elderly people receiving pension benefit from the Basic National Social Security Scheme in 2011.There are also about 60,000 pensioner receiving pension from CAP30(Findbiometrics. 2012). It altogether accounts for about 10% of the elderly population

Social Assistance

Since 2008, a social assistance program called The Livelihood Empowerment against Poverty Scheme (LEAP) has been implemented in Ghana. This program is to provide cash transfer and free medical service to the poverty population in Ghana. Elderly people is one of the target groups. In 2012, there are about 58,000 elderly people receiving benefit from the program (Handa et al.). It means that 5.6% of the elderly population is the beneficiaries of the program.

Figure 4.2 Distribution of Old Age Income Source



Source: Designed by Researcher

4.4. Development of the Pension System in Ghana

The development of the pension system in Ghana began from the British colonial period. CAP 30, a non-contributory defined benefit program targeted to the civil servants was established by the colonial government in 1946. This system continued after the independence and transformed into a contributory defined benefit system in 1975 after the passing of the Pensions and Social Security Decree.

At the same time, following the independence, the government has also extended the pension coverage to formal workers in the private sectors. In the 1960s, a national provident fund scheme based on the public DC system was implemented. In 1972, a statutory institution called The Social Security National Insurance Trust (SSNIT) was established to manage the fund[10]. However, due to the mismanagement of the fund and economic instability, the system has been changed to a defined benefit system operated under the PAYG prin-

[10] After 1972 new entry to the army or civil servants were forced to join the SSNIT, but those who joined CAP30 before could choose whether to shift to SSNIT. Later, the police and prison service reverted to the CAP30 from the SSNIT in 1985 and 1987.

ciple in 1991. Up to this period, the pension system only covered formal workers in the private and the public sectors[11], (Kpessa 2013, Dei 1997).

In 2003, a consultancy report commissioned by the government, which named "Report on the Development of Long Term Savings Instruments in Ghana", concluded that one of the main problems Ghana was facing was that the Ghanaians do too little long term savings in response to the erosion of the traditional old age support system. According to the report, 'the pressures created by the promotion of economic growth, together with the severe resource constraints confronting traditional systems, are all putting strains on the extended family as an effective cohesive unit that provides income security for the aged' and the Ghanaian are 'lacking of strong incentive to encourage savers to distinguish between short-term and long-term commitments and to choose the latter' (Sigma One Cooperation, 2003 :13). The report advised that the government to establish an institutional framework to facilitate the development of private pension fund to encourage long term savings. At the same time, the mismanagement of the SSNIT has aroused increasing resentment from the public. This resentment can be best illustrated by one of the placards used in the demonstration against SSNIT. It read: 'SSNIT PENSION IS WORSE THAN HIV/AIDS'(Kpessa 2013).

In 2004, in order to tackle the problem in the existing pension system, a Pension Reform Commission was formed to provide recommendations on the pension reform. Following its recommendations, the Pension Reform Act 766 was passed in 2008 and a new three-tiers pension system started in 2010. The main objective of the new pension system is to 'provide for pension benefits that will ensure retirement income security for workers and a better standard of living'(NPRA n.d.a). A statutory body, the National Pension Regulatory Authority (NPRA), has also been established under the law to oversee all the operators of the new pension system.

The three tiers-pension system has similar structure with the three pillars pension model of the World Bank. The first tier is a defined benefit system run by the SSNIT; the second tier is a mandatory privatized DC system while the third tier is a voluntary privatized DC system. The first and second tiers are for the formal workers while the third tier opens to both formal and informal workers. The logic of the government for adopting the privatized DC model (second and third tier) also tally with the logic embraced by the IFIs. According to the promotion material from the NPRA, such privatized DC model will, 'secures financial autonomy and independence of retirees'; 'increases National Savings and long term funds' and 'workers will have better control over their

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[11] Strictly speaking, according to the PNDC Law 247 enacted in 1991, all workers, including informal workers should be covered by the SSNIT, but the coverage of the informal workers was very low in reality.

pension benefits under the second and third tier schemes, which are to be privately-managed'(NPRA n.d.a).

Mr. Gamey Austin, one member of the Pension Reform Commission revealed in the interview that the IFIs, like the World Bank or IMF, did not directly involved in the debate of pension reform in Ghana. However as argued by Kpessa (2013), the influence of these institutions has been imposed to Ghana through a lengthy ideological diffusion process under their involvement in the development of Ghana. Policy diffusion also takes place through the influence of peer countries (Brooks 2005). In fact Mr. Gamey revealed that when deciding on the pension design, the Pension Reform Commission has taken a lot of reference from the Chile pension model. The diagnosis of the "Report on the Development of Long Term Savings Instruments in Ghana" should also be considered as part of such policy diffusion. The consultancy report is supported by the U.S. Agency for International Development, which is regarded as one of the key players in the promotion of the privatized DC pension model (Orenstein 2005). The consultancy agency, Sigma One Cooperation, has also engaged in many other projects related to trade and economic liberalization over the world[12].

4.5. Pension for the Informal Sector

According to the constitution of Ghana, all workers are supposed to be covered by the pension system. Article 37 (6)(a) of the 1992 Constitution states that the State has to 'ensure that contributory schemes are instituted and maintained that will guarantee economic security for self-employed and other citizens of Ghana'. However, informal workers had not been covered by any public pension system until the 2000s. In 2005, the SSNIT has initiated a pilot project, named ISS. This program later became the ISF[13] in 2008. The ISS was directly managed by the SSNIT. The ISF was operated by a special unit of the SSNIT but was in principle financially independent. It means that the system was shifted from a publicly managed system to a semi private system. This scheme is a voluntary DC system, where workers can contribute any amount anytime to the account[14]. The fund will use the contribution for investment

[12] According to the webpage of Sigma One, it describes itself as 'the company works with governments and regulatory bodies to promote business-friendly environments...and work directly with entrepreneurs to provide them with the business and technical know-how to exploit favourable economic conditions and expanded market opportunities"(Sigma One 2014).

[13] For simplicity, if not specified, the term ISF will also include the ISS in this paper.

[14] 50% of the contribution will be contributed to a savings account and 50% will be contributed to a pension account. Participants can withdraw from the savings account after 6 month of their contribution but they can only withdraw from their pension account after they retired.

and participants can choose to withdraw their savings after their retirement in lump sum or annuity. Savings collectors will be sent to collect money form the people. Formal workers can also participate in the scheme.

After the implementation of the pension Act 766 in 2010, the third-tier pension has been created for the informal workers, while formal workers can also participate. Similar to the ISF, it is also a voluntary DC system but is operated by private trustees. The scheme can be operated in the form of group pension scheme or personal pension schemes. The former is for the informal workers to organize together to join a pension scheme collectively (for example in the name of medical service organization or coco farmers organizations, etc.). The personal scheme is for the informal workers to join the plan as an individual[15]. Contribution is invested to the financial market and people can withdraw the money after they retired[16]. In contrast to the ISF, individuals cannot withdraw all their money in lump sum and must turn at least 75% of their savings in their pension account into annuity after they retired.

After the third tier plan is implemented, the ISF is supposed to be operated under the same governance structure with the third-tier pension. In 2012, a private trustee, called NTHC, took over the ISF. It means that both the ISF and the third tier is now a fully privatized system. Although the ISF has not followed the governance structure of the third tier pension entirely[17] , according to the Mr. Kawame Oakae-Kissiedu, the manager of the NPRA, it will be finally transformed as part of the third-tier pension. Table 4.1 is a summary of the mile stones of pension system development in Ghana.

As the structure of the third-tier pension is very similar to the ISF, the ISF to a certain extent can be regarded as a pilot project of the third-tier pension. In this paper, the new pension system refers to both the ISF and the third tier pension.

There is no comprehensive statistics about the enrollment of the new pension scheme available. The latest statistics (December 2011) show that about 91,000 workers have registered in the ISF (VibeGhana. 2012a). According to the manager of the ISF, about 20% of the ISF participants are formal workers, so the number of informal workers enrolled should be about 70,200. Taking account to the approximately 9 million population of informal workers, the

15 For formal workers who want to make extra voluntary contribution, it will be operated in the form of provident fund scheme.

16 Trustees are mandatory to provide a savings account to people where contribution saved in this account can be withdrew after 2 years of contribution

17 For example, the investment portfolio restriction is different; the minimum savings period of the savings account is also different

coverage of the ISF is less than 1%[18]. The manager of the NTHC revealed that the number of informal workers enrolled to other trustees should be negligible and the ISF is still the main service provider for the pension of informal workers. Thus it is reasonable to estimate that the total proportion of informal workers enrolled to the new pension system to be around 1%.

If the new pension system is as beneficial as its proponents claimed, the low take up rate of the new pension system should be explained. The chapters following will analyze the cause of the low take up rate and whether the new pension system really helps to enhance the old age income protection of the informal workers.

Table 4.1 Milestone of the pension development in Ghana

Milestone	**Time**
Establishment of CAP 30	1946
Establishment of National Provident Fund	1960s
Established of SSNIT	1972
National Provident Fund Turned to a PAYG Scheme	1991
Establishment of the Pilot Scheme: ISS	2005
ISS transformed to ISF	2008
Approval for the Pension Reform Act766	2008
Implementation of the Three Tier Pension Scheme	2010
NTHC take over the ISF	2012

Source: Designed by Researcher

18 It should be noted that the ISF keeps on growing in the past few years. It is reasonable to expect that the current coverage should be a little bit higher than 1%.

Chapter 5
Finding 1: Old Age Savings Strategies of the Informal Worker

Last chapter provides a brief introduction of the socio economic situation of Ghana. It has also reviewed the development of the pension system and the pension for the informal workers after the pension reform. One of the main objectives of the pension reform is to provide informal workers a savings instrument, in order to encourage and facilitate savings for their old age, which will be beneficial to both the individuals and the country. However, this logic is valid only if the informal workers really do not practice enough old age savings by themselves. This chapter analyzes whether informal workers save for their old age; their old age savings strategies and how far these strategies can fulfill their need of old age income protection.

5.1 Old Age Savings Strategies of the Informal Workers

In contrast to the analysis of the "Report on the Development of Long Term Savings Instruments in Ghana", all the informal workers interviewees in this research clearly show that they recognize the importance of savings for their old age and will save for their old age.

Almost all the interviewees are aware that there is a transformation in the social and economic structure in Ghana, and now unlike their parents and grandparents, they cannot depend only on the traditional old age protection system to support for their old age. One 27 years-old respondents, who works as a subcontractor of various construction projects used himself as an example to show how changes in the economic structure constrains the children's ability to support their parents:

"(If it was) in the past, my father (would) give me some land, so I will farm on the land. We depended on the land. I was sure before the year ended, the land would produce crops. I would sell it and I had enough to take care of myself and my father. But now….I do not have the land to do farming..... so that I cannot support them (my parents)." (I4)

As a result, they think that it is necessary for this generation to prepare for their old age. This man further explained:

"At the end of your old age, you will not receive anything from anywhere, so you have to start saving or doing little things (starting a small business), to bring you income for the future." (I4)

5.2 Savings Strategies: Combination of Investment Instrument:

Although informal workers have clear concept of old age savings, they adopt different savings strategies rather than making use of the formal financial institutions for long term savings (except using bank).

In the "Report on the Development of Long Term Savings Instruments in Ghana", long term savings refers to investment instrument with long maturity period. In developed countries, it is usually in the form of pension fund or insurance operated by the financial institutions. The fund will be used for long term investment and turned into annuity when people retired.

From the interview, informal workers in Ghana seldom use such long term savings instrument of the formal financial institutions. However, their old age savings strategies are not necessarily less effective. By using their own old age savings strategies, they can still perform similar functions as the long term savings instrument provided by the formal financial institution in developed countries, such as contribution, investment or transforming asset into annuity.

Such old age savings strategies are made possible by the combination of different savings/investment instrument with different mature period and different risk profile. In general, this savings strategy can be categorized in to three stages: 1.turning stream of income into initial capital for investment, 2.investment on own income generating capacity, 3.buying income generating asset.

Turning Stream of Income into Initial Capital for Investment

Informal workers usually earn small amount of income in a daily basis. To turn their stream of daily income into larger block of initial long term investment capital, many of the informal workers will save by using the service of SUSU[19]. SUSU is a common informal financial institution in Ghana. There are two kinds of SUSU in Ghana: one is the individual money collectors and the other is run by the semi-formal financial institution. The SUSU sends savings collectors to collect small amount of savings from people (usually targeting informal workers) and then returns the total amount money one have saved at the end of the month[20]. An amount equivalent to one day's contribution is deducted from the total amount of monthly deposit as the commission for the financial service provided by the savings collectors, so the monthly interest rate is -3%. (Annual interest rate is -54.4%) (Ernest Aryeetey, et al. 1994). The SUSU is not strictly regulated[21] and most of the interviewees claimed that they have experienced savings collectors or the semi-formal financial institution running away with the money, so they do not trust the SUSU completely.

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[19] Instead of using SUSU, some of the interviewees will save by using the penny box.

[20] Although people can borrow from the SUSU (usually in the form of payment in advance for one month), survey finds that only about 9% of the money deposit is used as loans. Also, none of the interviewees in this research has borrowed from the SUSU. It means that SUSU works as a savings instrument more than a credit instrument in Ghana

[21] They are under the regulation of Non-bank financial Institutions Act 2008.

However, although the SUSU is subjected to high commission charge and high default risk, many people are still using the SUSU. When asked why they use the SUSU to save rather than save by themselves (for example by saving in their penny box), most of the interviewees replied that the SUSU helps to discipline themselves from using the money in unnecessary consumption. For example, one youngster who is a part-time taxi driver and part-time mechanic apprentice and has highly unstable income explained:

"If the money is with me, I will use it to do unnecessary thing. …But if it (the money) is with that person (the SUSU collectors), (and if) that person is not there, how can I go and collect it? You see, it (The SUSU) saves the money for me." (I11)

Although in principle they can also perform similar function by saving in the bank, but in reality it is difficult for them to save their small amount of daily income to the banks. For example, one hair dresser who earned income on a daily basis explained:

"You can put 20 GH₵ into banks. But now in Ghana, (when) you go to bank, you have to queue. And if it is not a large amount of money, you don't want to queue. You leave your job. It (savings to the bank) keeps you from the job for 20 GH₵. It is hard for us."(I1)

In sum the SUSU helps to discipline people to turn small stream of income to larger bloc of money. This function is especially important for informal workers, as their unstable income gives them more opportunity to spend extra money when their income is in the up tide.

Investment on Own Income Generating Capacity

According to the interviewees, informal workers seldom use formal investment instrument, like stock or bond, to invest the block of capital they saved from their stream of small income,. However, it does not mean that they do not have means to acquire high investment return for their old age savings. Most of the informal workers interviewed revealed that they will achieve this objective by investing in enhancing their own income generating capacity.

When asked about old age savings, the thing that many interviewees first mentioned is investing in their own business or starting a new business, so that they can improve their current income generating ability to prepare for their old age.

Investment in own business does not necessarily mean buying a new shop or employing more people. Many interviewees explained that investment on their business can mean just buying a new tool or keeping on the turnover of the store to accumulate profit. For example, when asked about the old age savings strategies, one mechanic master (he runs his business in an open space) showed me how he expanded his business by buying different tools (like the burning gun or driller etc.) bit by bit and his ultimate goal is buy a land to build his own garage (I3). Another example is that when talking about investment, one salon owner explained how she accumulates profit in her business by keeping on the turnover of her salon:

" ….. I can go and buy an item to come. If the items come, and I continue working (to sell the item), then I am saving the money (that I gain from the selling). Then the thing will finish again and I will go and withdraw the money I have saved to buy another item, so that I can guarantee another profit."(I9)

They usually consider this investment strategy as an ongoing process; foreseeing themselves to get higher income and get more investment to further enhance their income. This spiral will be a long term process till people retired. For example the salon owner further explained her investment plan in the future:

"Maybe I save a little at a time and get money. I will open another one (shop), and I will take in a staff. Some people will take care of the shop. Maybe pay her monthly. This place will also move on and I will get the money; I will bring another one and I will bring another person" (I9)

Besides investing in the business, investment in one self can also be a strategy of enhancing own income generating capacity. When explaining their old age savings strategies, some interviewees mentioned that they are saving for the tuition fee for better education so that they can pursue for a better paying work in the future. One interviewee even mentioned that he wanted to save a block of money as a bribe to get a job from the police or army, so that he would have better income to prepare for his old age.

Investing on own income generating capacity should be a rational strategy for the people in Ghana. Firstly, as securing a job for the informal workers in Ghana is difficult, running a business has always been an important survival strategy for many Ghanaians.

Secondly, as the capital for investment is scarce in Ghana, the return for investing into a business or self-investment will be high. It can partly be reflected by the high interest rate[22] of borrowing in Ghana. If own savings rather than loan is used for investment in business, the high interest payment forgone can be considered as the minimum investment return of the savings.

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[22] According to a report, micro finance company charged an annual interest rate of 48%-78% (Micro Capital 2013)

These two factors make investing in own income generating capacity a feasible and promising investment opportunity.

Buying Income Generating Asset

The third stage of the old age savings strategy is to invest in stable income generating asset before retirement. For the informal workers, it is usually done by investing on land and property. When they are old, the rental payment of the land and property can generate stable income. The hair dresser mentioned in pervious section explained why he is planning to buy a house:

"You build some houses and when you grow older you will use that house and rent. And you get something small when you cannot work. You get something small to take care of yourself. That is our pension"(I1)

Another important source of stable old age income is by investing in children's education. Although children support has been an important source of old age income support since the past, many interviewees revealed that one of the biggest difference about children support between now and the past is that people have to invest in children if one wants to get good return from their children. In fact, most interviewees used the term "investment" when they talked about children support. One middle-age male clothes trader explained how he considers children as investment even he has no children:

"If you educate your children…If your children go to school and become somebody, they will take care of you when you become old and cannot work in the farm. (If) your children are well educated and get a good job, they can give you l money for food or buying the things you need each month." (I7)

Considering children as an "investment" does not mean that parents support their children just because of economic rationality. In fact most of the interviewees emphasized that the mutual support between the parents and the children is based on emotional bonding and moral duty. However, they also have a clear idea that the more ones invest on children's education, the more their children will be able to support them when they are old.

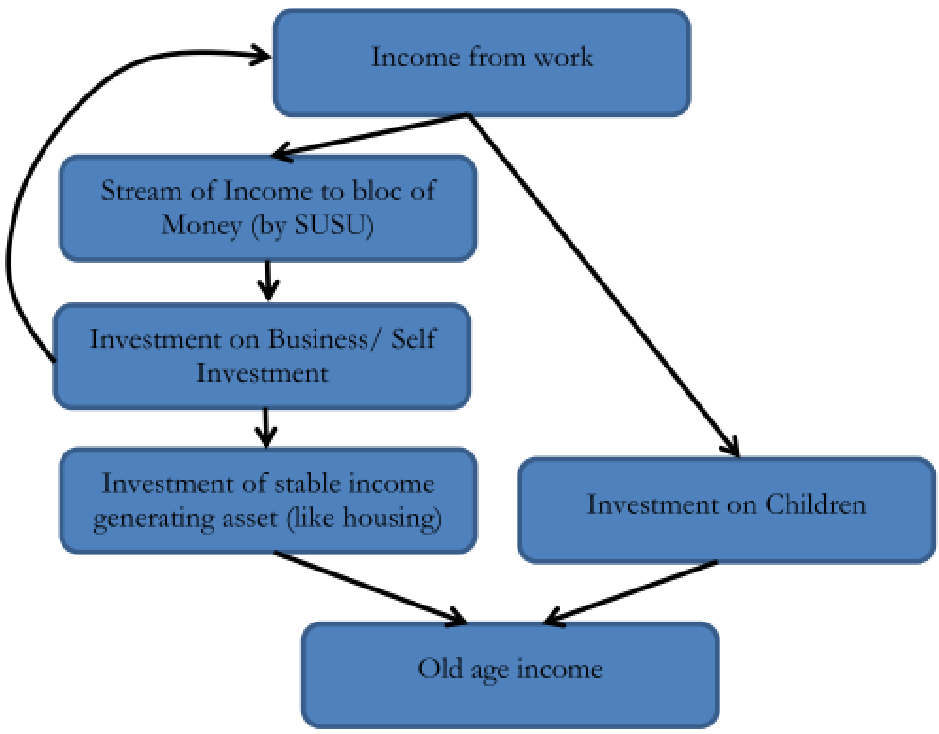
Such preference on land and housing and investing on children as an instrument of old age support should not be considered as a sign of pre-modern or irrationality. It can be a rational choice under the high inflation risk and high default risk borne by other financial instruments. For example, one 30-years-old female street vendor who are earning small money every day and dreaming to buy a house explained how people can avoid default risk by buying a house.

"For example, it you are buying a car (for investment), or investing in the banks, the banks can collapse in anytime or there may be a car accident which you can't even repair the car again. But if I get a house even if I die in Ghana, my children can come and take care of it. It lasts for a long time."(I10)

For investment in children, as income earned by the next generation will be in general growing in line with the overall economic growth of Ghana, it makes "investing" in children a good investment against inflation. It means that both preference for investment on children and substantive goods at least should be partly explained by economic rationality.

Figure 5.1 summarizes of how the combination of different savings/investment instrument can be turned to a comprehensive old age savings strategies. It shows that the savings strategies of the informal workers can perform similar function of the formal savings instrument.

Figure 5.1 Summary of old age savings/investment strategies



Source: Design by Researcher

5.3 Unmet Gasp

Although informal workers in Ghana are clear about old age savings and they realize the combination of different savings instrument can perform similar

functions normally provided by the formal financial institutions, there are still gaps that cannot be met by the existing savings strategies.
The savings strategies of informal workers can give them high-risk-high-return investment opportunity, but there is no low-risk savings instrument that can provide basic retirement income for the informal workers.

Both default risk and investment risk can be high in different stages of the savings strategies adopted by the informal workers. In the stage of turning stream of income into initial investment capital, as mentioned in the previous section, the SUSU program is not strictly regulated and is subjected to high default risk. In the stage of investing in own income generating capacity, although return of the investment can be high, running a business is also subjected to high risk of losing money. In the stage of investing in stable income generating asset, many people consider buying land and building houses as a low risk investment instrument that generates guaranteed income, but in reality, people may be too optimistic on the risk induced in the housing market under the booming property market in recent years. Furthermore, as products like reverse mortgage is not common in Ghana; people cannot fully liquidate the value of the land and house into a guaranteed stream of income when they retired[23]. When asked to comment on the problem of the existing savings strategies that people are using, the first thing mentioned by the manager of PETER is the lack of liquidity of the land and property

.

Most of the interviewees also expressed that "Investment" in children is not guaranteed. One of the interviewees has a son studying in a university in the USA and planning to return Ghana, however he still believes that he cannot totally depend on his child in old age. He explained:

"Because children will grow and get married and they will face their own challenges in life. So you cannot depend on them too much. You can depend on them for 20%.... If you go and ask them (for money), if they like they will give it to you, if they don't have (money to give you), they don't have."(I3)

The only guaranteed income savings instrument that can be used by the informal workers is the bank account. All the interviewees consider the default risk of the bank (at least for the national bank) to be low, so that they are quite sure they can get the money saved in the bank back when they get old. The problem of saving money in the bank is the low interest paid. Under the high inflation situation, the savings in the bank account can have negative real return.

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[23] It should be noted that the unavailability of reverse mortgage is not the only reason why elderly people fail to fully liquidate the value of their property. Most of the interviewees also consider their property as an important heritage for their children.

Conclusively, the findings show that informal workers (at least for those with higher education attainment and income level) in Ghana can find high-risk-high-return savings opportunities from their existing old age savings strategies, but they can hardly find savings instrument that are low risk and provide them basic income when they get old. As a result, a low risk pension providing people with basic income will be a good complement to the existing old age savings strategies that informal workers are using. When asked whether they will welcome a new government pension designed for the informal workers, many of the interviewees show their interest in joining such a scheme if it can provide them some minimum level of protection. One carpenter who has a big plan for expanding his business explained why he would like to join a government pension:

"The advantage of SSNIT[24] is: when your business collapsed, anything can happen to you. The payment of SSNIT is constant. Unless you die before your (old) age, you will get the benefit…. When your business collapses; let's assume you have built a house and there's fire, if you have insured the house I will be happy, otherwise there is nothing I can do. But with the SSNIT, constantly I will get some money (paid to me)." (I2)

Summary:

This chapter debunks the perception embraced by the IFIs and the government that informal workers in Ghana do not practice long term savings. It argues that informal workers practice old age and the savings strategies they currently adopt can perform similar functions as saving with formal financial institutions.

However, the existing old age savings strategies can only provide people with a high-risk-high-return old age investment instrument. As a result, a pension system that is low risk and provides basic income when people retired will be a good complement to the existing savings strategies.

Next chapter will discuss whether the new pension system can perform such role for the informal workers.

[24] When I explained such kind of pension policy to them, they used SSNIT to name it.

Chapter 6
Finding 2: Impact on the New Pension System to Enhance Old Age Income Protection of Informal Workers

Last chapter pointed out that informal workers is practicing an effective high-risk- high-return old age savings strategies and what they need is a pension system that provides them low risk and basic income in their old age. This chapter will analyze whether the privatized DC pension is a reasonable policy option to enhance old age income protection of the informal workers in Ghana out of their existing old age savings strategies.

6.1 Accessibility of the New Pension System

No matter how effective a pension system is, it is meaningless if the system is not accessible to its potential users. This research finds that the new pension system fails to provide accessible services (both in term of information accessibility and service delivery accessibility). The lack of information accessibility is the direct cause for the low take up rate of the system.

The main reason for the low system accessibility is that mobilizing savings from the informal workers, who have unstable income and are not used to save with formal financial institutions, involves very labor intensive and costly work. Savings collectors have to be sent to collect small contribution from informal workers. According to the front line manager of the ISF, under this system design, people can contribute their savings in a way that they feel familiar with. As he explained:

"In the informal sector, most of the people have strong fear to come to the bank. Considering the nature of the informal sector, we would rather go and reach them, so it is quite easy for them to make the payment to certain place where (someone) will collect the contribution (S1)"

This arrangement makes the system very costly. The ISF manager estimated that the administrative cost for collecting the savings from each member is about 10GH₵ per month and the average monthly savings of the ISF members is around 50GH₵ per month. It means that the administrative cost for savings collection represents almost 20% of the savings collected. Sometimes the administrative cost paid for the savings collectors will be even higher than the money collected.

However, the manager of the ISF also suggested that the administrative cost will be lower when people are more familiar with the system and have a more organized pattern of contribution. As he explained:

"But in the long run, when you go and register the persons, they start contributing. You see, the cost is reduced, because you probably limit the frequency for going to the person. Maybe (in the past) you need to reach them everyday; (now) you only go for once or twice in a month ... after sometimes you can mobilize and advise them and convince people from the same area to pay on the same day. It means the cost will be reduced" (S1)

It means that for the system to reduce the administrative cost, the savings mobilization work has to be concentrated on certain locality and this would only happen when the system mature and enjoys some economy of scale in that locality. The ISF now have about 70 savings collectors running in 7 communities in Accra. According to both the managers of ISF and NTHC, with the maturation of the program, the system now gets to break even. However, on the other hand, it also means that if the service has to be extended to a new community (especially to where informal workers are less concentrated) the cost efficiency of the program will decrease again. Hence it is difficult for this system to expand its geographic-coverage.

If even the ISF, which enjoys an established network and savings mobilization infrastructure, can just barely break even, it will be difficult for other private trustees to make profit by starting from zero. It is the main barrier that hinders the private trustees to enter into this business. The manager of the NTHC explained:

"A lot of the trustees leave (the market) because of the cost of operation.… Their chance of survival is very small, because you have people (informal workers) paying you very little money, like 10 GH₵ or 5 GH₵. But you have to employ some staff (to collect the money). How much do you have to pay to mobilize the people and cover the whole region? It is very expensive. Very. They (the trustees) may come on board; starting isn't an issue; (but the problem is) how you can follow through" (N1)

This is also verified by the manager of PETER. She claims that PETER as a profit- making company, cannot be expected to play an active role in providing the third-tier pension to informal workers under the high administrative cost.

As a result, although it is expected that the opening of market for service provision to the private financial institutions after 2010 will attract new trustees to expand service coverage, according to the mangers of both NTHC and PETER, only very few trustees have the intention to enter into the business. The latest information released by the NPRA (NPRA 2012) shows that among the 24 registered trustees, only 2 trustees have obtained provisional approval for running personal pension scheme. And among these 2 trustees, only 1 has listed the informal worker pension in the service menu of their websites[25].

In fact, the reason that the ISF can survive in the first place can be largely attributed to its public (in the ISS period) and semi-private (in the early ISF period) nature. The managers of SSNIT revealed that the SSNIT started the ISS is with non-profit motives. This is proved by a statement released by the SSNIT in 2012, claiming that although the ISF is supposed to be financially independent from the SSNIT, it cannot be self-sustainable to cover its administrative cost and the SSNIT has provided a start-up support of 7.2 million GH₵ for building the structure of savings mobilization (while the fund size in 2012 is about 23 million GH₵)(VibeGhana. 2012b)

Besides lack of accessibility in term of service delivery, another problem of the new pension system is the lack of informational accessibility. Many informal workers even do not know about the existence of the new pension system. For the informal workers interviewed in this research, all except 2 have never heard of the new pension system. And even the remaining 2 do not know any substantial details of the system. Without even aware of the existence of new pension system, it is impossible for them to take up the service.

In the individual trustee level, failure to promote the pension system can be considered as part of the service delivery problem. As the trustees are the front line operators of the pension system, they are also the key agents to promote their service to its potential clients. If the trustees do not enter the market or only provide the service within certain communities, they will have no incentive to widely promote the new pension system.

Apart from the trustees, the NPRA is also responsible to promote the new pension system in the central level. However, it is questionable whether the NPRA has enough capacity to carry out its promotion function. The NPRA only operates in one office with about 40 head counts (according to Mr. Kwame, the manager of the NPRA), while the office is responsible for all the administrative work related to the pension reform, including registration of pension scheme, approval of trustees, establishing rules and guidelines, conducting research, etc, with all together 19 functions to be performed (Appendix 3).

From the written reply of NPRA, the major method to encourage participation from the informal workers is to adopt out reaching approach and to collaborate with different civil society organizations, such as the TUC. All these initiatives are labor intensive. For example, Mr. Kwame explains that one of

[25] There are also 1 trustee getting approval and 5 getting provisional approvals to run group personal pension scheme. According to the informants of TUC, joining pension scheme in group is not common in informal sector.

on their most important promotion strategy is the Out Reaching Campaign. Staff from the NPRA travel around all the 10 regions in Ghana and start a one week campaign in each region. During each of the promotional campaign they will reserve one day to organize a seminar for the informal workers. It means that for the whole country, only ten one-day seminars are organized for the informal workers.

The above analysis shows that because of the high transaction cost in delivering the service to informal workers and the lack of capacity for the NPRA to promote the system, informal workers do not even know about the existence of the system. It is the direct cause for the low uptake rate. However, even if the problem of accessibility can be solved, it is still unsure to what extent the take up rate of the new pension system can be boosted up. It depends on whether the new pension system is really useful to the informal workers. In the previous chapter, it is showed that informal workers need a low risk pension that provides basic income in old age in addition to their existing old age savings strategies. The following sections will analyze whether new pension system can perform this function.

6.2 Risk of the New Pension System

Risk of the new pension system involves default risk and the investment risk.

In terms of providing a pension with lower default risk, the new pension system is relatively successful.

Before the 2008 pension reform, the ISF was supported by the SSNIT. Although some interviewees are dissatisfied with the bureaucratic procedure involved in the SSNIT and their fund management performance, it is in general believed that the SSNIT, as a government institution, will not default. As the representative of the TUC explained:

"We have some assurance when you go for (your) pension; we know that whenever you go by, SNNIT will give you your money. SSNIT will not take your money, even if it is peanuts." (T1)

After the 2010, the third-tier pension and the ISF have been run by the private financial institutions. To make sure that the private financial institution is robust enough, a strict regulation in their governance structure was designed. According to the Pension Act766, the fund has to be managed by a custodian, trustee and a fund manager. The trustee is responsible for the administration of the scheme (including the selection of custodian and fund manager), but they will not keep custody of the pension fund. The custodian is responsible for holding the asset and handling the transaction of the asset but not making investment decision. The fund manager is responsible to make investment decision but they do not have access to the pension fund. All these three parties have to be independent from each other and have to be registered under the NPRA[26]. This mechanism is to separate the function of administration, investment and the holding of the asset, so to prevent misuse.

Furthermore, under section 158a of the Pension Act 766, the custodians have to 'issue a guarantee to the full sum and value of pension funds and assets held by it or to be held by it' (National Pensions Act 2008). For the trustees, they have to 'take adequate insurance to indemnify scheme members against any losses of scheme assets caused by malfeasance or misconduct of the trustees or their service providers' (NPRA. n.d.c). This multi-layer of guarantee is supposed to be able to avoid any chance of default caused by institutional failure.

However, having a strict regulatory framework does not necessarily mean that it will be followed. For example, the managers of the NPRA revealed that all the contribution of the second tier pension are supposed to be managed by the registered trustee by 2012, but up to 2014, most of the fund still keeps on contributing to the Temporary Fund Account (TFA) managed by the Bank of Ghana. Another example is that according to the Pension Act766, to ensure the independence of NPRA, the operation of the NPRA should be financially supported by the administrative cost (0.33% of the asset value) charged from the second and third pension fund[27]. However, due to the current problems in registration, the NPRA still has to get financial support from the government to maintain its operation. Furthermore, as explained in the previous section, it is questionable whether the NPRA have enough capacity to handle all its supervisory functions. The NPRA for example is supposed to analyze the implementation of the pension reform, but up to now the NPRA still has not compiled any statistics about the new pension system. It will hinder the capacity of the NPRA to perform their supervisory function. These findings suggest that comparatively, the shifting from a semi-privatized to a fully privatized system in the new pension system may induce even more default risk.

For investment risk, in the new pension system investment risk is supposed to be controlled by two mechanisms. Frist, the pension fund uses a diversified portfolio to control risk. In the written reply of the NPRA, it explained that: "the diversification of the investment portfolios is to ensure some constant returns on the fund because the effects of non-performing investment will be

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[26] The fund managers and the trustees also have to be registered in the Security and Exchange Commission

[27] Taking the current size of the fund into account, it will generate at least 3.6 million GH₵ operating cost per year

neutralized by the performing portfolios so a member doesn't lose out"(Email reply from NARP).

The second mechanism to control investment risk is through strict restrictions placed on the investment portfolio. Although investment regulation of the ISF is not obtained, according to the manager of NTHC, the investment portfolio of ISF should mainly compose of treasure bill and fixed income generating security. Only a small amount can be invested in the equity market. After the 2008 reform, the investment portfolio of the third-tier pension is regulated by the Guidelines on Investment of Scheme Funds (NPRA. n.d.b). Under this regulation, the maximum proportion of asset that can be allocated to a specific type of asset is limited. Only 10 % of the asset can be invested in the equity market (Table 6.1). It should be noted that there is a loophole on such restrictions on the investment portfolio. As only a ceiling instead of a floor is set in different asset class, in theory the fund can have zero investment in treasure bills and all the investment can be put into asset with relatively high risk, like the money market or cooperate bond, etc[28].

Table 6.1: Maximum % of different type of investment in the Pension Fund Asset

Type of Investment	Maximum Investment as % of Pension Fund Assets
Securities of Government of Ghana	75%
Local Government Bond	30%
Corporate Bond/Debt	30%
Money Market	35%
Ordinary Share	10%
Open and Close End Fund	5%

Source: Guidelines on Investment of Scheme Funds (NPRA, 2014c)

According to the managers of both NTHC and PETER, the pension fund is now predominantly invested in treasure bills. It means that in practice the investment risk of the new pension system is controlled mainly by the second mechanism.

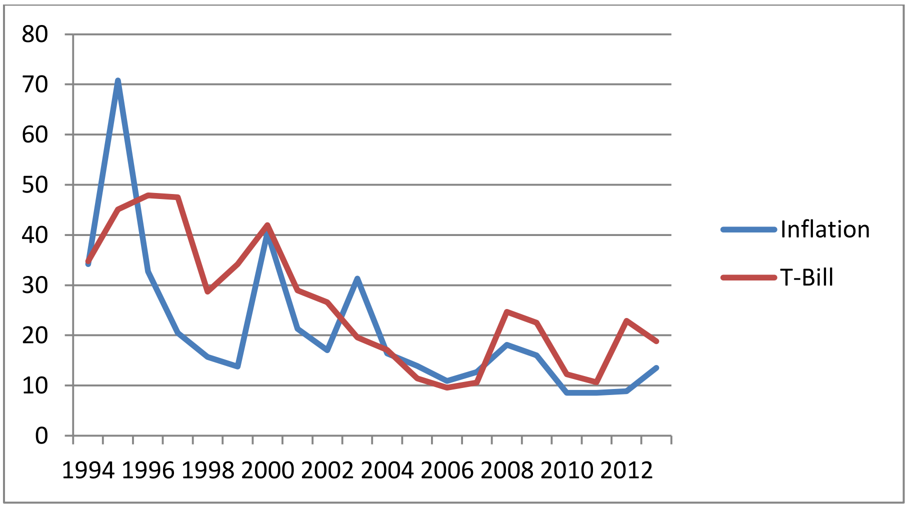
However, restricting the investment portfolio has its limitation on risk reduction in Ghana. As the financial market of Ghana is still under developed, there are not many income generating assets with long maturity period available. In contrast to the 30 year treasure bills issued by the US, the longest ma-

[28] The maximum limit that fund managers can invest in local government bond, cooperate bond, money market and stock market add up to 105%.If the most risky portfolio is taken, the pension fund can invest 5% in open end fund, 10% in equities, 35% in money market, 30% in cooperate bond, 20% in local government bond and 0% in government bond.

turity period of the Ghana treasure bills is 7 years. Because of the recent financial instability, the Bank of Ghana even stops to auction the 5 and 7 year treasure bills and the longest maturity period treasure bills issuing now is only 2 years. Form the statistics of the National Bank of Ghana, in the past twenty years the rate of treasure bill[29] could fluctuate greatly from the lowest point of 9.6% to the higher point of 47.9%. It means that the investment return of the pension fund will also be subjected to such high fluctuation. On the other hand, there is also no inflation indexed treasure bills issued in Ghana, but the inflation rate of Ghana fluctuates greatly under the unstable economic condition. In the last 20 years, the inflation rate has varied from 8.6% to 70.8% (Figure 6.1).

As a result, the real investments return of the pension system subject to both the fluctuation of the treasure bills rate and the inflation rate. Even taking the more stable past 10 years as reference, the treasure bill rate still fluctuated from 9.6% to 24.7% and the inflation rate fluctuated from 8.6% to 18.1%. It makes the real return of the treasure bills in the past 10 years varied between the highest point of 14.1% to the lowest point of -2.5% in individual year (Figure 6.2) (For 20 years period, it varied from -25.47% to 27.0%). At a result, under such unstable economic environment, the reduction in investment risk of the pension fund is relatively limited even if the pension fund is formed by the "low risk" portfolio.

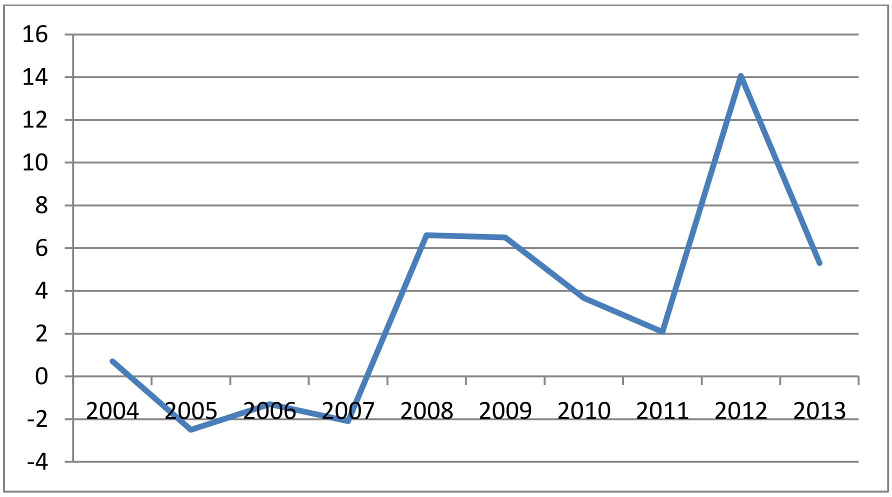
Figure 6.1: 91Days T-bill Rate and Inflation Rate (%) of Ghana (Jun 2004 – Dec 2013)



Soruce: Natioanl Bank of Ghana

[29] The rate of 91 Days T-bill is used, as 10 years statistics is only available for T-bills with 91 days or shorter period of maturity.

Figure 6.2 Real Return of 91 Days T-Bill Rate (%) of Ghana 2003-2013



Source: National Bank of Ghana

6.3 Level of Income Paid by the Pension System

The underlying logic of both the ISF and the third tier pension is to use the contribution for long term investment in order to provide better retirement payment to the people.

Under the logic of the system design, by employing professional fund managers, who are to 'achieve the best possible returns on the funds within the specific investment parameters' (NPRA. 2014c) it is expected that better Investment return can be achieved. After 2010, the schemes are 'privately managed under a free competition environment thereby increasing efficiency and reduce costs, which will benefit scheme members ultimately' (NPRA n.d.a). It is believed that after the system become fully privatized, profit-making incentive will drive trustees to achieve better investment return and lower administrative cost.

However, as the portfolio is predominantly invested in treasure bills, both the managers of the NTHC and PETER revealed that the return will be more or less the same as the return of the treasure bills. The managers of NTHC further admitted that in general the return should be lower than the treasure bills rate as they have to keep certain amount of cash and also to pay for administrative cost. It means that there is not much room for adjusting the portfolio to enhance better return.

Furthermore, even competition can really lead to better investment performance[30], it is not relevant to the new pension system, where only very few private trustees have entered into the business and the ISF is still enjoying a natural monopoly position.

Another factor that influences the investment return is the administrative cost. For the ISF, under the current regulation, they can charge at most 20% of the investment return as administrative cost[31]. For the third tier-pension, administrative cost has to be paid to the trustees, fund managers custodian and the NPRA. Altogether it adds up to maximum 2.5% of the asset value per annum. Details of the break down are shown in table 6.2. Compare to the administrative cost charged by similar programs in other countries, the administrative cost charged in Ghana is extremely high (Ernst & Young 2012)(Table 6.3).

Table 6.2: Maximum Administrative Cost by Different Stake-holders in the Pension System

Stake Holder	**Approved Trustee**	**Pension Fund Manager**	**Pension Fund Custodian**	**NPRA (Regulator)**	**Total**
Maximum Charge %p.a.	1.33	0.56	0.28	0.33	2.5

Source: Reply from NARP

Table 6.3 Administrative Cost in Provident Fund Scheme Charged in Selected Countries:

Countries	**Hong Kong**	**Chile**	**US**	**Australia**	**Mexico**
Admin Cost %p.a.	1.74%	0.60%	0.83%	1.21%	1.32%

Source: (Ernst & Young 2012)

Although trustees can charge less than the maximum restriction, the manager of PETER suggested that in fact the administrative cost charged is not enough to cover the real expense. It means that for the third tier pension, even

[30] It is itself arguable as recent research find that market mechanism does not always work in pension market.
[31] If taking the return of the treasure bill as the benchmark of the investment return, it will be equal to about 4%-5% of the asset value per annum

if competition is available, there is no room for the trustees to squeeze out their profit margin and compete for lower administrative cost.

Assuming that the entire pension fund is invested in treasures bills (from the statistics obtained in the previous section, the average real return in the past 10 years is 3.3%), after deducting the administrative cost, the average real return of the pension fund is only about 0.8%[32]. A rough estimation[33] of a worker who works with no gap from the age of 20 to 59 with stable real income[34] and contribute in the same contribution rate of the formal workers in the first and second tier pension (5.5% of the income per month)[35] will get a real replacement rate of about 17%. For a people earning the average income, a 17% replacement rate will generate a daily income below half of the international poverty line (1.25USD a day)[36].

In the above estimation, the actual pension payment people can get is totally subjected to the contribution level. The underlying logic of the new pension system, as a DC system, is that the risk of low contribution is totally borne by individuals. As under this system contribution is voluntary, not only low income workers will transfer their miserable situation to their old age, workers with unstable income will also suffer from their broken contribution record. This problem is especially valid for the informal workers, as people with unstable income will have greater need for precautionary savings and find it more difficult to contribute for long term savings (Deaton 1989). For example, one hair dresser earning relatively high income (on average about 2000 GH₵ per month) still expressed that it is difficult for him to make stable contribution to a third tier pension:

"This one (the third-tier pension) is good if you are get paid every day. But now, we have been sitting for an hour. No people come and call me (for job). You cannot take that money out. It is a problem for you. It is difficult for you." (I1)

It means that it will be more difficult for an informal worker to get a basic income in their old age from this system.

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32 The actual return should be higher, as part of the pension fund should be used in higher return asset.

33 The assumption and calculation of the benefit is shown in Appendix 4

34 If the real income of the worker keeps growing, the replacement rate of the pension income to the average life long salary will be lower than the above figure. For example, if the real income of the workers keeps on growing for 5% per year, the replacement rate will be about 22%.

35 Not includes the employers contribution

36 Using 17% as the replacement rate, the daily income of the pensioner will be about 0.5 USD.

Summary:

This chapter has analyzed whether the new pension system can enhance the old age income protection of the informal workers in addition to their existing old age savings strategies. It finds that because of the informalization of the labor, the low government capacity and the underdeveloped financial market, it fails to achieve this objective.

The high administrative cost of mobilizing savings and the lacking of capacity of the NARP make the system cannot be accessible to informal workers. As the system cannot even be known by informal workers, it is the direct cause of its low take up rate. The findings also suggest that there is a system failure of the new pension system to enhance the old age income protection of the informal workers. With low institutional capacity, the system has limitation in reducing its risk and generating basic income in people's old age. Furthermore, the new pension system, as a DC system, is subjected to contribution risk. This risk is extremely high for informal workers with unstable income. Informal workers find it very hard to get a basic income from this scheme that will enough to bring them out of poverty.

Chapter 7
Conclusion and Discussion

In response to the eroding traditional old age support system, Ghana has adopted a voluntary DC pension (first publicly system and fully privatize after 2010) for informal workers, in order to enhance their old age income protection. According to the logic embraced by the proponents of this system, on one hand, as Ghanaians practice little old age savings, this system can encourage and facilitate people to make rational savings choice. On the other hand, as the government does not have enough capacity to manage the pension, a DC system (especially a privatized DC system) will result in better administration, lower risk and better pension benefit. However, although the new pension system is claimed to be effective in enhancing old age income protection of the informal workers, up to now, the take up rate is only about 1%.

This research paper investigates the cause of the low take up rate, basis on whether the new pension system can act as a feasible solution in enhancing the old age income protection of the informal workers. To answer these questions, the two underlying logics of the voluntary privatized DC pension model have been re-examined: Do informal workers save for their old age? Is the voluntary (privatized) DC pension an effective system to enhance the old age income protection of the informal workers out of their existing savings strategies?

7.1. The Main Findings

Finding 1: Informal workers in Ghana save for their old age and their old age savings strategies can perform the same function as the formal financial institutions.

This research shows that informal workers in Ghana are well aware of the need of old age savings due to the erosion of the traditional old age support system. Although they do not practice old age savings through the formal financial institutions, they make use of a combination of different investment instruments that perform similar functions as the formal financial institution. This savings strategy is particularly effective under the informalized labor market and the unstable economic environment of Ghana. As a result, the old age savings strategies adopted by the informal workers can be effective for them to pursue for old age income protection.

However, there are still gaps that cannot be met by the existing old age savings strategies. The existing old age savings strategies provides a high-risk-high-return investment instrument but cannot provide informal workers with a low risk instrument that can generate basic income in their old age.

Finding 2: Due to institutional constraints, the voluntary privatized DC pension model cannot not even provide an accessible system to the informal workers. It also fails to provide a low risk pension that generates basic income for the informal workers in their old age.

The instability nature of the informal workers leads to high administrative cost for collecting contribution from them. With such high administrative cost, the new pension system is hard to extend service coverage and the private trustees have low incentive to enter the market. Furthermore, the NPRA does not have enough capacity to perform its role in promoting the system. As a result, the new pension system fails to be accessible to the informal workers both in term of information and service delivery. Without even knowing the existence of the system, it is impossible for the informal workers to join the new pension system and it becomes the direct cause of the low take up rate.

Although the new pension system is relatively successful in reducing the default risk by using the SSNIT to run the ISF and setting strict regulation for the private trustees after the 2008 reform, the underdeveloped financial market and economic instability limit the investment risk that can be reduced by the system. Furthermore, how far the strict regulation in 2008 pension reform is actually followed is also under question.

For the level of income to be generated by the system, administrative cost of the new pension is high and it reduces the return of the pension fund. Privatization can neither reduce administrative cost nor boost up investment return as competition is not available. Projection of the investment return shows that people with average income if contribute the same rate as the formal workers in the first and second tier pension will get an income falling far below the international poverty line.

The finding also shows that fully privatization after the 2008 pension reform does not alleviate the problems existed in the ISS (public DC system) or the ISF(semi-privatized DC system). In some domains, privatization even s worsen the problems (for example in extension of service coverage).

To answer the research question, this paper argues that the low take up rate of the new pension system is directly caused by the information barriers under the failure of building an accessible system to the informal workers in the new pension system. However, this paper further suggests even if the new pension system is taken up by the informal workers, the system failures in the new pension still make it ineffective to enhance the old age income protection of the informal workers in addition to their existing old age savings strategies. Informal workers have already has an effective savings strategies and institutional constraints restrict the feasibility of the new pension system to reduce risk and generate basic income. It debunks the myth diffused by the IFIs that the voluntary privatized DC model is a suitable pension model to enhance the old age income protection of the developing countries.

7.2. Discussion:

The findings of this paper debunk two logics that IFIs embraced for advocating the voluntary privatized DC pension model in developing countries. First it debunks the thesis that people in developing countries do not save for their old age. In fact, it is showed that people in Ghana practice old age savings effectively but with strategies that are overlooked by conventional studies. As a result, substitute it with the formal savings instrument may not necessarily lead to better outcome. Second, it debunks the belief that privatized DC pension system is effective in countries with low government capacity. This research finds that lack of government capacity, as well as other institutional capacity (such as a formalized labor market and a developed financial market), will lead to high administrative cost for a privatized DC pension system to function effectively. This problem is more prominent if the system is voluntary basis and targets informal workers.

If institutional capacity is needed no matter whether a public or privatized pension system is adopted, establishing a tax financed defined benefit system may be a more feasible solution of pension reform in Ghana. It is because in contrast to the voluntary privatized DC solution, which has to be supported by state capacity, a well-developed financial market and a formalized labor market, where the last two criteria are not directly controlled by the government, building a public defined benefit pension system only needs the development of state capacity which is more manageable for the government. Interestingly, when evaluating the impact of the pension reform, the manager of the NPRA admitted that the most successful part is the reform in the public pension tier (the first tier). It shows that without any market mechanism, the Ghana government can improve the governance of the public pension by their own effort.

This kind of tax financed defined benefit pension has already been implemented in many African countries such as South Africa, Rwanda, Kenya and Mauritius (Stewart and Hu 2009)[37]. Given that Ghana enjoys a young population and strong economic growth, Ghana is in a more favorable condition to maintain the sustainability of the system. This system can be means tested or universal, but if government capacity is really the main issue of concern, a flat rate universal pension is a more feasible solution. It is because it does not require the government to have the capacity to conduct income or asset test,

[37] Rwanda and Mauritius are practicing a universal system while South Africa and Kenya are using a means tested system.

which is almost impossible in an economy pre-dominated by informal labor (Mkandawire 2005). The flat rate benefit level also makes it easier to implement and monitor the system. Estimation shows that Ghana should have the fiscal space to adopt such a system. A basic pension with 1.25US per day to all the elderly population over 60 only costs about 1.73% of the GDP (or less than 5% of the current government expenditure) in Ghana (Knox-Vydmanov. 2011). This system will in principle lift the entire elderly population out of poverty. Actually, the TUC advocated for a similar proposal during the debate of pension reform in 2008, but this proposal was turned down by the government.

Ghana has adopted the voluntary privatized DC model to enhance the old age income protection of informal workers. Although this system has been implemented in many countries and is diffused globally under the advocacy of the IFIs since the 90s, this study debunks the logics embraced by the proponents of the model. On one hand, the informal workers have already practices old age savings by an efficient savings strategy and do not need further encouragement or facilitation for savings. On the other hand, without institutional capacity, this system is neither accessible to informal workers nor is effective in enhancing their old age income protection. Hence strengthening the government capacity and building a tax financed defined benefit pension program may be a more manageable solution for Ghana.

This research is only an exploratory research for the new pension system in Ghana. Two possible areas can be explored in the future. Firstly, survey by representative sampling can be conducted to find out how savings strategies as showed in this study can be generalized to the population in Ghana. Secondly, a comprehensive study can be conducted to investigate feasible ways to establish a universal flat rate pension in Ghana.

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Source of Statistics Data Base:

National Bank of Ghana (Monthly Timer Series Statistics Data)

World Bank (World Development Indicators)

Word Bank (Financial Inclusion Data)

Appendix 1
List of Interviewees

List of Interviewees- Informal Workers

Code	Occupation	Nature of Occupation	Gen-der	Age	Income	Education Attainment
I1	Hair Dresser	Business Owner	M	Over 30	2000	Unknown
I2	Carpenter	Self Employed	M	32	600	Junior Secondary
I3	Mechanic	Business Owner	M	48	500	Technical Diploma
I4	Construction Sub-Contractor	Self Employed	M	27	Save 100	Technical School
I5	Truck Driver	Self Employed	M	40	300	Junior Secondary
I6	Taxi driver	Self Employed	M	45	1000	Technical School
I7	Clothes Traders	Business Owner	M	38	300	Junior Secondary
I8	Glossary Shop Own-ers	Business Owner	F	37	(Unknown) save 300 CD Per month	Senior Secondary
I9	Hairdresser	Business Owner	F	29	300	Junior Secondary
I10	Street Vend-er for Food	Self Employed	F	30	600	Junior Secondary
I11	Part Time Mechanic Apprentice Part Time Taxi Driver	Part time self employed Part time em-ployees	M	27	280	Technical Diploma
I12	Mechanic Apprentice	Employees	M	24	50	Junior Secondary
I13	Shop Keeper	Employees	M	25	200	Junior High
I14	Technician	Employees	M	22	300	Senior Secondary
I15	Butcher	Business Owner	M	30	600	Technical school
I16	Construction Worker	Self Employed	M	29	600	Higher National Diploma

List of Interviewees- Elites

Code	Organiza-tion/Company	Nature of the Organization	Position
A1 (Mr. Kwame Okae-Kissiedu)	NARP	Supervisory Body	Manager
P1 (Mr. Austin Gamey)	Pension Reform Commission	Policy Design Commission	Member
S1	ISF	Front Line Opera-tion Agency	Manager
N1	NTHC	Trustee	Manager
P1	PETER	Trustee	Manager
G1	Great World	Saving and Loan Company	Manager
T1	TUC	Trade Union	Organizer

Appendix 2
Interview Guide for Informal Workers[38]

In term of how the elderly people support for their old age, is there difference between your generation and the past generation? If yes, what is the difference? What is the difference in term of 1.children support to parent, 2.Support from extended family?

(If there is different) Under such transformation, how do you prepare for your old age?

(If there is more than one strategy) How do you compare these difference strategies? Which one is most useful for you? Why?

(If investment is mentioned) For investment, you need a larger bloc of money. How can you save for that initial bloc of money for your investment?

When the price becomes higher and higher, what can you do to retain the purchasing power of your saving?

I know that some people in Ghana will use the (treasure bills/saving program of the insurance companies/ buying a house/ investing on children/investing on business)[39] to save for the old age, do you use it? Why?

Have you ever heard of the government pension reform or informal sector fund?

Do you think this kind of pension program is useful for you? Why? (If they have not heard of the program, a belief introduction about the program will be given to them first)

Do you prefer this program to be run by the SSNIT or run by the private financial companies?

Do you prefer the money to be paid in lump sum or annuity? Why?

After you are retried, what do you expect to be your major source of income?

Do you find any difference between the saving behavior of men and women in Ghana?

Personal Information to be obtained: Age, Occupation, Income, Educational Attainment, Family Structure

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[38] As each individual in the elite group will have a tailor made interview guide, it is not shown it this appendix

[39] The items that is not mentioned in the answer of the previous question will be picked

Appendix 3
Functions to be performed by the NPRA

(a) be responsible for ensuring compliance with this Act;
(b) register occupational pension schemes, provident funds and personal pension schemes;
(c) issue guidelines for the investment of pension funds;
(d) approve, regulate and monitor trustees, pension fund managers, custodians and other institutions that deal with pensions as the Authority may determine;
(e) establish standards, rules and guidelines for the management of pension funds under this Act;
(f) regulate the affairs and activities of approved trustees and ensure that the trustees administer the registered schemes;
(g) regulate and monitor the implementation of the Basic National Social Security Scheme; (h) carry-out research and ensure the maintenance of a national data bank on pension matters;
(i) sensitise the public on matters related to the various pension schemes;
(j) receive and investigate complaints of impropriety in respect of the management of pension schemes;
(k) promote and encourage the development of the pension scheme industry in the country;
(l) receive, and investigate grievances from pensioners and provide for redress;
(m) advise government on the general welfare of pensioners;
(n) advise government on the overall policy on pensions in the country;
(o) request information from any employer, trustee, pension fund manager or custodian, any other person or institution on matters related to retirement benefit;
(p) charge and collect fees as the Authority may determine;
(q) impose administrative sanctions or fines; and
(r) perform any other functions that are ancillary to the object of the Authority

Source: National Pension Act 766

Appendix 4

Calculation of the Old Age Income form the Pension Fund

The following assumption is used for calculation:

1. People save from 20-59 years old without stopping.

2.10% of the monthly income is saved.

3. Monthly income is constant in real term.

4. Investment return keep constant at 0.8%(3.3%) annually no matter on the saving or the annuity payment period.

5.All accumulated investment will be put to annuity (According to the Pension Act 766, the minimum proportion of accumulation has to be put to annuity is 75%)

6. The remaining life of an average Ghanaian is 17 years after 60 (WHO, 2014).

7. In the saving period, contribution is deposited to the pension fund at the end of each years and investment return is compounded once per month. In the dissaving period, pension payment is paid to people once per year at the beginning of each year

Formula used to calculate the accumulation of asset and the payment of the annuity is as follows:

Accumulation period:

$$A = Cx12\,(1 + r / 12)^{40n}$$

A: Pension accumulated, C: Monthly Contribution, r: Real rate of return, n: number of contribution per year

Payment on Annuity:

$$B = [\,A(1 + r)^{16-1} r\,] / [\,(1 + r)^{16} - 1\,]$$

B: Benefit Paid Annually

Reference:

WHO (Last updated 2014) Global Health Observatory Data Repository: Life Table by Country Ghana. Accessed 1/11 2014 < http://apps.who.int/gho/data/view.main.60630?lang=en>