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# HEALTH INSURANCE SCHEMES AND RETIREES WELFARE: THE CASE OF SELECTED INSURANCE COMPANIES IN KIGALI RWANDA

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#### Abstract

The purpose of this study was to assess the contribution of the public and private health care scheme to the retirees' welfare in Kigali City. The specific objectives aimed to find out how is the health insurance scheme set-up in both public and private structures in Kigali, to assess the welfare of retirees in terms of the level of access to health insurance scheme in Kigali and to determine the relationship between health insurance scheme and retirees welfare in Kigali. The researcher adopted a descriptive and correlation design in order to ensure that sufficient information and clarity of the research is assured. The study was conducted in RSSB, MMI, Soras Assurance Générales Limited, Saham Assurance Rwanda Limited, and the retirees members of Association of retirees in Rwanda (ARR) all based in Kigali. Quantitative data was entered into appropriate analysis program, preferably statistical package for social sciences (SPSS) from which analysis was done using descriptive statistics (proportions/percentages, rates). Pearson correlations were used to ascertain the correlation between the dependent and independent variables. The study revealed that retirees in Rwanda still face challenges after their retirement because the amount of pension they receive based on their earned salary ranges. Finally, the study recommends that retirees through their national association (ARR) with members throughout the country are to be sensitized for a large scale and long term saving plan to fund the special welfare needs of retirees in the long run. Such retirees' fund would be a large scale saving model that can partner with the related public actors to top up the basic pension and medical public schemes.

Keywords: Health insurance schemes, Invalidity pension, Affordability, Basic necessities



#### INTRODUCTION

Health insurance scheme benefits differ widely across the globe. Countries all over the world are trying to improve on how they handle their workforce once they reach the age of retirement. The working lives of employees move continuously towards a certain direction i.e. from employment, to growth, to retirement. Some are fortunate to save enough money to take them through the retirement period, while a majority leaves the service with little or no savings at all. Since early 1990s, many countries across the globe have undertaken health insurance scheme reform aimed at improving the welfare of their retirees after retirement (Li, 2012).

International Labor Organization (ILO, 2017) estimates in new publication that some 90 per cent of the world's working-age population is not covered by pension schemes capable of providing adequate retirement income. This has been attributed to bad management of many existing schemes which makes matters worse and leaves much of the world's population exposed to the risk of poverty at old age. Eventually, this leads to a high number of retirees living poor after serving in either private or public institutions for a long period of time.

The ILO (2017) finds that the advanced industrialized countries of the Organization of Economic Cooperation and Development (OECD) mainly North America, Western Europe, Japan and Australia has nearly universal coverage and insurance schemes are well managed. In such countries with well managed health insurance schemes, the welfare of retirees is secured and they live comfortably after retirement.

In Africa pension and health schemes are very weak in general (ILO, 2017). Such state of health insurance schemes affects the welfare of the retirees in the sense of facilitating them with enough financial support at the time they need it most after retirement.

Though in African countries most people in formal sector jobs contribute to pension, provident or retirement annuity funds and some people save enough in this way to be able to live adequately in retirement, many do not save, or leave it too late in their careers to save enough for retirement. This is partly because many working people cash in their pension savings when they change jobs, or have informal or irregular employment, which makes it difficult to save (Nevondwe, 2010).

Once retired, the health scheme coverage is lowered and subsequently retirees' standard of living follows the same trend. The limitations are observed at the very starting point of the retirement period. The private sector as a profit oriented organizations does no longer support its retiree's medical scheme. All insurance companies are reluctant to cater for retirees' health coverage that becomes more risky and expensive as people gets older. Barya (2011) highlighted that by 2009 only RAMA (currently RSSB health insurance scheme) covering 23% of the formal sector is the only scheme maintaining its affiliated members after retirements.

Lateron towards end of 2015, ten years after its creation, MMI incorporated also retirees former affiliated members by the Prime Minister's Order N° 202/03 of 13/10/2015 on the supervising authority, category and management of Military Medical Insurance (MMI) and determining the organization, functioning and responsibilities of its organs(see official gazette no43 of 26.10.2015).

## Statement of the problem

Governments and private investors have come up with pension plans to facilitate employees to plan for their future retirement welfare. However, many employers who used to offer definedbenefit plans are now shifting to defined-contribution plans because of the increased liability and expenses that are associated with defined-benefit plans, thus increasing the uncertainty of a financially secure retirement for many. For instance, the RSSB records indicate that over 30 percent of these people are given a monthly pension that is less than Rwf 30,000, some getting even less than Rwf 10,000 because of the pension laws in the country. The cost of living has gone up tremendously and the value of the franc has deteriorated over the years, yet nothing much has changed in the pension laws (Kagire, 2011).

Therefore retirees' used to occupational health schemes during their working life time end up in frustrating lowered medical care situation when they need it most. However, although there are existing challenges in this area, this field has attracted few academic scholars to conduct empirical study particularly in Rwanda in order to show the relationship between public and private health care scheme and retirees' welfare. This twisted the curiosity of the researcher to know whether insurances schemes have had any relationship with retirees' welfare in Kigali.

## RELATED LITERATURE

The man who had the initial idea developing this theory was then a 38-year-old research associate at the Donner Laboratory of Medical Physics in Berkeley, named Denham Harman. He postulated that ageing is the result of the progressive accumulation of changes in the body which occurs with the passing of time and which cause the increase in the probability of disease and death of the individual. It can also be defined as the wearing of the structures and functions of the individuals of a given species that reach a peak or plateau during development and maturations (Vina, 2007). Elderly persons develop lower capacity to endure extreme temperatures, infections, or in general the situations in which stress occurs. Thus, the force and elasticity of the skeletal and muscular system are deteriorated; there is a lower glomeral filtration in the kidneys, lower pulmonary ventilation, and a lower blood flow through the heart.

Another theory of ageing is the activity theory which is based on the belief that in order for one to age successfully, he or she must keep active. It was first stated by Havighurst and Albrecht (1953) who said that social role participation is essential for positive adjustment to old age. In 1963, Havighurst and colleagues created the term "activity theory". In 1972, then, it was Lemon and colleagues who formalized the theory which proposed that older people could only remain psychologically and socially fit if they remained active and that loss of roles in old age affect life satisfaction negatively. Above all, the quality of interaction is more important than the quantity of activity (Hasan & Kazlauskas, 2014).

The continuity (or developmental) theory was put forward by Neugarten in 1968 because none of the other theories successfully explained ageing. The continuity theory of aging is a theoretical framework for the study of adulthood. Continuity theory suggests that both development and adaptation are continuous, cumulative, and incremental throughout life, occurring in a series of ongoing, smooth, small steps. It is a construct that suggests that learning is based on experience. For example, an older adult solving a problem is likely able to apply decades of life experience to the task. Continuity theory asserts that the behavior and thinking of older adults' behavior tend to follow the individual patterns (both continuity of selfhood and external sense of belonging) of behavior and thought established throughout life, while flexibly adapting to life's ongoing changes. Continuity theory connects adaptive change with experience to a successful aging process, focusing on continuity (stability) but also, equally, discontinuity and the necessity of flexibility toward positive outcomes (Lynch et al. 2015).

### Link between the aging theory and retirement

Continuity theory helps describe the psychological development of middle-aged and older individuals, particularly with regard to retirement. The theoretical assumption of continuity theory is that individuals are regularly guided by existing internal mental frameworks, which make them more likely to maintain similar patterns of behaviors or lifestyles across time, changing only slowly (Cooper, 2015).

According to Denton and Spencer (2009), the Oxford English Dictionary defines retirement as follows: "To withdraw from office, or an official position; to give up one's business or occupation in order to enjoy more leisure or freedom (especially after having made a competence or earned a pension)". They continue to add that retirement can be voluntary or involuntary; gradual or sudden; temporary or permanent. Hence, there is no one clear definition which embodies all the possible situations.

As described in the Macroeconomics of Pensions and Ageing (Meijdam, 2012), "generally people do not participate in the labor market in the last phase of their lives; they are not able to independently acquire income". Subsequently their lives standing are meant to be supported by the state, other forms of private insurance or both. That is supposed to be done in a regulated way to ensure smooth implementation. In the present research perspective the formal sector retirees risk in their old stage to suffer from the lack of consistent and stable health system coverage they were used to benefit from during their active life. According to Barya (2011) these benefits must be adequate in amount or duration to ensure an adequate standard of living with sound healthcare system.

#### Health insurance schemes

Global aging is the issue that all the countries in the world need to face and get ready to cater for in a sustainable way in line with health care systems of elderly people. For developing countries this problem looms even larger, as according to US National Institute of Aging, The current rate of growth of the older population in developing countries is more than double that in developed countries (GAA Report, 2007). As of 2008, 62 percent (313 million) of the world's people 65 and older lived in developing countries. By 2040, today's developing countries are likely to be home to more than 1 billion people 65 and over, 76 percent of the projected world total. This striking statistics means that in several decades there will be many more old people, and that their life length will get higher as well. All these people will need financial support, and if the social security system cannot handle the loading now, the chance is slight that the necessary reforms will catch up fast enough (GAA Report, 2007). It implies that pension and health schemes require to be adjusted accordingly on a regular basis.

Developed countries vary significantly in how they generate revenue used to fund health plans. In most countries, proportional or progressive taxes earmarked for health care are used as the primary source of revenue (e.g., Canada, Germany, Singapore and Japan), although in some cases general tax revenues predominate (Ellis, Chen, & Luscombe, 2014).

An increasing number of African countries have recently initiated major parametric and systemic reform of their pension systems (often on the initiative of stakeholder, advisory committees and international organizations) and are beginning to adopt diversified approaches to pension provision in order to strengthen retirement security of their workforce. Many other authorities are in the process of formulating serious reform proposals and are exploring ways to encourage more saving over the long run.

As ascertained by Kapuya (2003) human being is vulnerable to risk, contingencies and uncertainties with respect to income as a mean of life sustenance. Such socio-economic risks and uncertainties in human life form the basis for the need of social security and no individual who can guarantee his or her own security. Social security means any kind of collective measures or activities designed to ensure that members of society meet their basic needs and are protected from the contingencies to enable them to maintain a standard of living consistent with social norms.

In that light there is a concept of early retirement pension commonly known as an Anticipated pension that apply to individual that become physically or mentally disabled before the retirement age, in other words, when he/she is no longer able to work for a salary. In Rwanda early retirement benefit parameters are similar. Once one becomes physically or mentally incapacitated without any salary earning, he/she can apply for early retirement benefits. The conditions set are that the applicant's contribution in RSSB must have last for at least 15 years and continuous medical assessment is required (RSSB brochure, 2016:9)

### **Invalidity pension**

Invalidity Pension is a pension payment to people who cannot work because of a long-term illness or disability. Disability Support Pension provides financial support if one has a physical, intellectual or psychiatric condition that stops you from working, or if you are permanently blind. In Cyprus, the invalidity pension consists of a basic pension and a supplementary pension calculated according to the degree of disability suffered. If the insured person suffered a total loss of earning capacity, he/she will be granted with a full invalidity pension, calculated as follows: the basic pension is 60% of the annual average basic covered earnings, increased to 80%, 90% and 100% for one, two or three dependents respectively.

Bloom et al (2007) cited that in RSSB, an individual may become an invalid following an accident or disease having no origin from occupational work-related circumstances. To be eligible to the invalidity pension, beneficiaries should have at least 3 years of contributions. They should also have actively contributed for at least 6 of the last 12 months before the start of the disability. Invalidity is regularly assessed by a doctor chosen by RSSB (RSSB brochure, 2016:10).

Pensioners (for both types of pension: old-age pension and invalidity pension) receive a minimum pension equal to 50% of the legal minimum wage (RWF 10,400 -Approx. USD 16.3) and the monthly pension paid is normally supposed to be adjusted periodically by presidential decree though currently, the last adjustment was made in April 2002 (INSSA (2008:3-4). Compared to South Africa, the value of the subsidy was ZAR (South African rand)1,080

(approx. USD 140) per month in 2010 (Department of Social Development in South) for individuals between the age of 18 and 59 years are eligible to the invalidity insurance when they lost income due to the health conditions. Obviously it is clear that the monthly minimum wage provided by Rwanda is very low and should be adjusted.

## Affordability of basic necessities

The best places to live after retirement are mainly located in Europe with Norway, Switzerland and Iceland the top countries to offer a comfortable environment for those who hung up their boots, a recent report has shown. Retirees in these countries can be able to afford basic necessities. The a study was conducted computes a retirement security score by analyzing 18 points relevant to retiree welfare across four categories, namely finance, healthcare, material well-being and quality of life (GRI, 2016).

Every human being is vulnerable to risks and uncertainties at different levels in life with respect to income as a means of life sustenance. In order to fight against these risks, every person requires some form of social security guaranteed by family, community and the society at large. It is hypothesized that the welfare of retirees determines their life expectancy. Life expectancy in the U.S. has been slowly but steadily increasing over the past century. This is attributed with access to good medical care, and who follow a healthy lifestyle. People who live longer are generally healthier than people who don't, and retirees rank staying healthy as a top factor for happiness. These life expectancies are calculated by the actuaries who assess each country's social security or government pension system. Each actuary may have differing views of optimism regarding future improvements in mortality (Verson, 2017).

The cost of living in many developed countries has increased hence most of the people in these countries spend less amount in saving for retirement. However, unlike earlier generations who joined the workforce immediately after graduation at age 20 or 21, the demand for higher education has meant the age at which one starts to work is now 25 or more

The reality is, today's retirees are faced with a range of challenges, all impacting their ability to save for retirement and sustain the same standard of living they were able to uphold prior to retirement. Widespread variations in geography, socioeconomic structures, and culture, cannot conceal the common opportunities and challenges that have affected African families. Even in relatively affluent South Africa with a developed pension system for most of its urban workers, the quality of life of older persons has deteriorated over the years because of poverty and inadequate housing. Some South African communities have attempted to mitigate the social strains on older persons by emphasizing multi-generation households. According to the

research, South African retirees are not able to maintain their standard of living in retirement, with 62% admitting they experienced a reduction in income at retirement (Hot News, 2015).

## **Empirical studies**

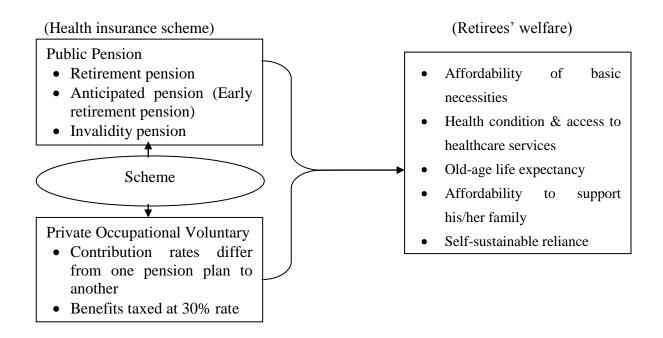
According to a UK essay (2013), the Australian study indicates that retirement may be a stressful and challenging event and that planning was directly correlated with successful adaptation. The authors conclude that post-retirement perceptions of planning most of the time may not correspond with pre-retirement preparation. In their study, more emphasis was placed of financial planning and psychosocial adjustment to their life after employment. There was a significant increase in sedentary activities which may correlate with an increased risk of health problems found in this age group, hence retirees should be encouraged not only in social interactions, but in physical activity too. Differences were found in planning according to the person's employment position, which relates to the need of developing post-retirement planning programs which are individualized to the type of worker.

Hopkins (2017) asserted that many people do not view life insurance as an essential and vital part of a retirement income plan rather see life it as a way to protect families from the early loss of a breadwinner during the working years. However, life insurance has the potential to be so much more if properly utilized in a comprehensive retirement income plan. Insurance plays an important role in any financial plan. It helps loved ones recover from financial risks and unexpected costs, increasing their chances of reaching long-term goals and achieving dreams. Unfortunately, many people do not fully understand nor appreciate the value and benefits that life insurance can represent as part of a retirement plan. Having the correct type of life insurance and the appropriate amount of life insurance coverage in retirement will accomplish multiple jobs

Davis, (2013) argues that the main division of pension schemes has been made on the basis of a three-pillar system. This has developed into and been broadly interpreted as a public pillar, an occupational pillar and a voluntary individual pillar. Lannoo, Barslund, Chmelar and Werder, (2014) pointed out that following this categorization, the first pillar serves as a means for avoiding old-age poverty, the second pillar focuses on an adequate pension in terms of the replacement rate, while the third pillar is meant to provide an opportunity for individuals to save towards increasing their retirement income. The first pillar is state-managed PAYG with an element of redistribution, since there is no close link between contribution and benefits. The second pillar contains the earnings-related pension provision in traditional PAYG schemes as well as funded pension defined contribution (DC) and defined benefit (DB) schemes available to a smaller or larger group in a number of Member States.

## **Conceptual framework**

Figure 1 Conceptual framework



The above figure highlights the relationship between Health insurance benefit design and retiree social welfare. Rwanda has only one compulsory public pension scheme called Rwanda Social Security Board (RSSB) which is administered by a public agency. It is obligatory for all employers and workers within the public and private sectors to contribute. It is currently a fully funded defined benefit (DB) plan and the government assumes the investment risk. The contribution rates are 3% and 5% of the gross salary by employees and employers respectively. Public pension system covers almost 5.6% of the active population (IOPS, 2011).

The second pillar in Rwanda consist of occupational voluntary pension schemes that rely on the fact that financed through the contributions whose rates differ from one pension plan to another. The majority of the occupational voluntary pension schemes invest in insurance companies where capital and some limited level of return is certain. Benefits are paid as lump sums, under occupational voluntary schemes. All investments, employers and employees' contributions are taxed at a rate of 30% (IOPS, 2011).

The last pillar is a voluntary savings pillar, which is available to anyone who cares to supplement the retirement pension income provided by the first two pillars (Willmore, 2006). The Private Personal Voluntary scheme in Rwanda is characterized by the individually DC plans

offered by insurance companies and the benefits are paid as lump sum. Both members' contributions and benefits are not taxed (IOPS, 2011).

The pension is calculated based on the salaries of the beneficiary's last 3 or 5 years of activity which determine the monthly average remuneration used in the calculation of his/her old age pension (Barya, 2011). For the first 15 years, the pension will be 30% of the average earnings during the last 3 or 5 years explained by the International Social Security Association (ISSA, 2008).

#### **METHODOLOGY**

## Study Population and Sampling

This descriptive study used simple random and purposive sampling techniques. Simple random sampling was used on managers in order to give equal chance of every employee to be selected because they all have relevant information on the issues. Purposive sampling technique was used on managers through interview in order to get additional information and to avoid bias. Sampling technique or procedure the researcher would adopt in selecting items or individual for the sample. Due to resources constraints (time and money), the whole population cannot be covered, consequently, sample size was chosen by the researcher. The researcher preferred to use universal sampling technique to select respondents from the top management and finance department because they are the ones who may provide the useful information to test the hypothesis of this research.

Table 1 Sampling frame

Target groups	Target population	Sample size
Saham Assurance Rwanda Limited Managers	3	
Soras Assurances Générales Limited Managers	3	
RSSB health insurance scheme Managers	3	$n = \frac{N}{1 + N(e)^2}$
MMI Managers	3	
Retirees/ARR	177	
Target groups	189	

According to Kothari, (2004) a sample size is the number of observations used for calculating estimates of a given population. Where the population is less than 10.000, a smaller sample size can be used without affecting the accuracy this is called the adjusted minimum sample size. It is calculated using the following simple formula (Yamane (1967)

$$n = \frac{N}{1 + N(e)^2}$$

Where, n is minimum sample size, N is the target population (189), e is the margin of error calculated at 5%.

In this case N= 189 taking the accuracy or confidence level of 95% that is with an acceptable margin of error of 5%, e=0.05.

Therefore, 
$$n = \frac{189}{1 + 189 * (0.05)^2}$$
 this gives  $\frac{189}{1 + 189 * 0.0025} = \frac{189}{1 + 0.147} = \frac{189}{1.47} = 128$  respondents

#### **Data Collection Tools**

The researcher collected primary data using questionnaires and interviews and telephone calls. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Questionnaires have advantages over some other types of surveys in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardized answers that make it simple to compile data. However, such standardized answers may frustrate users. Questionnaires are also sharply limited by the fact that respondents must be able to read the questions and respond to them.

#### **Data Analysis Approach**

Quantitative data was entered into appropriate analysis program, preferably statistical package for social sciences (SPSS) from which analysis was done using descriptive statistics (proportions/percentages, rates). Descriptive statistics were used to estimate the mean and standard deviations of certain variables to ascertain how close or wider the sample statistics were spread from the mean. This was done in order to avoid the generation of numerous similar tables which otherwise could be simplified using one table showing the average mean of the majority response. Cross tabulation was also done to ascertain the correlation between the dependent and independent variables. This was done by correlation some of the measurable variables describing the independent variables against the variables describing dependent variables. Pearson correlation values were used to ascertain the strength or weakness existing between the two correlated variables. Quantitative data was presented in tables, charts, graphs and narratives. Qualitative data was entered into a compilation sheet whereby the information from various respondents was tabulated. Responses which showed similarities were given a theme. Each theme was transferred into one sheet from which final analysis was done in



relation to objectives of this study. This was done by narrating the responses accordingly with verbatim reporting so that some strong feelings of respondents can be reported as they are.

#### **ANALYSIS AND FINDINGS**

## Gender of the respondents

The study sought to find out the gender of the respondents in order to determine the gender distribution of retirees in Rwanda. Table 2 shows the findings of the study.

Table 2 Gender of the respondents

	Frequency	Percent
Male	86	79.6
Female	22	20.4
Total	108	100.0

The study found out that (86) 79.6% of the respondents were male and (22) 20.4% were female. This indicates that in average, majority of the retirees are male.

Women constitute the majority of worker in informal sector through necessity, not choice. Majority of women find themselves working in informal sector because of social and cultural practices which limits them to household engagements. Therefore, majority of the women are not eligible to earn retirement pension.

#### Sector of work

The study finds out the sector of work of the respondents where majority of the retirees used to work before retirement.

Table 3 Sector of work before retirement

	Frequency	Percent
Private sector	19	17.6
Public Sector	82	75.9
NGO	7	6.5
Total	108	100.0

The study reveals that (82) 75.9% of the respondents formerly worked in public sector, (19) 17.6% formerly worked in private sector and (7) 6.5% used to work in NGOs. This implies that in general majority of the retirees in Kigali city used to work in public sector. Individual workers are eligible for a monthly pension at the age of 65 years and individual can retire at the age of 60 when he/she has contributed for at least 15 years (Art. 101 of the Law on General Statutes of Rwandan Public Service).

RSSB provide Pension scheme aims at helping the worker who becomes old and incapable of working for a salary or becomes invalid and incapable of living by working; helping the survivors of the deceased worker. The Social Security benefits offered by the branch of pensions are therefore divided into two categories: Those given to the insured person himself when old or invalid and those given to his eligible survivors.

#### Retirement age

Table 4 Respondents who retired before age of 65

	Frequency	Percent	
Yes	101	93.5	
No	7	6.5	
Total	108	100.0	

The study reveals that all the sampled majority respondents, that is 101 representing 93.5% stated that they retired before the age of 65 based on the previous law amended by the recent one of 2015 while (7) 6.5% mentioned that they retired after the age of 65 as per the new law of 2015 that extended the retirement age to 65. Individuals are eligible for a monthly pension at the age of 60 if they have accumulated 15 years of service, or at age 65. Majority of those who retired before the age of 65 opted to pursue other activities which can increase their level of income.

## Type of social security systems registered for the pension

There are three main types of social security in Rwanda namely; the public pension, private occupational voluntary and private personal voluntary. The researcher sought to find out the type of social security pension where majority of the retirees fall under. The following figure provides the results;

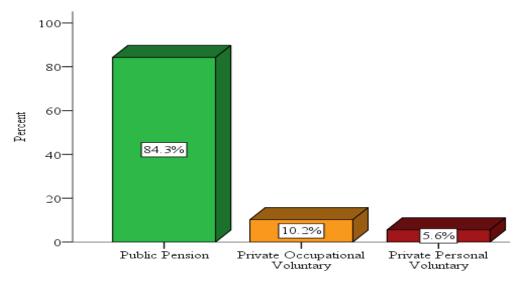


Figure 2 Type of social security systems registered for the pension

The study indicates that 84.3% of the respondents stated that they are registered in public pension scheme, 10.2% said that they have private occupational voluntary and 5.6% said that they are registered in private personal voluntary pension. This implies that majority of the retirees who used to work in public formal sector access public pension scheme.

According to the International Organization of Pension Survivors (IOPS, 2011) Rwanda has only one compulsory public pension scheme called "CaisseSociale du Rwanda" (CSR) which is administered by a public agency. It is obligatory for all employers and workers within the public and private sectors to join the RSSB.

The majority of the occupational voluntary pension schemes invest in insurance companies where capital and some limited level of return is certain. Benefits are paid as lump sums, under occupational voluntary schemes. The Private Personal Voluntary scheme in Rwanda is characterized by the individually plans offered by insurance companies and the benefits are paid as lump sum (IOPS, 2011)

### Limits of the existing social security systems in Rwanda

The main purpose of asking this question was to ascertain the challenges which exist in social security system in Rwanda. The researcher suggested some of the perceived challenges as highlighted in the literature review in order to get the opinion of the respondents on the same subject matter.

Table 5 Limits of the existing social security systems

-	Mean	Std. Deviation
Many workers were unable to contribute a		-
relatively high percentage of their incomes since	1.3889	.74675
they had other urgent needs		
Many people feel less need for pensions, as for		
many of them old age appears very remote and	1.3704	.76845
the idea of retirement perhaps unreal		
Majority of the workers are reluctant to contribute		
because they were either unfamiliar with social	1.5556	1.01699
security schemes or distrusted the way they were	1.5550	1.01099
managed		
There is a financial imbalances in the schemes	1.3519	.63120
The benefits are insufficient s compared to the	1.2222	.53535
living standard	1.2222	.55555
Valid N (listwise)		

The study indicated that majority of the respondents strongly agreed that many workers were unable to contribute a relatively high percentage of their incomes since they had other urgent needs as indicated the descriptive statistics with a (Mean=1.3889 & heterogeneous standard deviation of .74675). This is evidently indicated by the mean which ranged between 1.00 ≤ mean score  $\leq$  1.50 as highlighted in the measurement parameters above.

Many people feel less need for pensions, as for many of them old age appears very remote and the idea of retirement perhaps unreal. This was evident from the statistics which shown by (Mean=1.3704 && heterogeneous standard deviation of .76845) which means that majority of the respondents strongly agreed with this variable as highlighted by the mean which ranges between  $1.00 \le \text{mean score} \le 1.50$ .

The study also indicated that majority of the workers are reluctant to contribute because they were either unfamiliar with social security schemes or distrusted the way they were managed (Mean=1.5556 & heterogeneous standard deviation of 1.01699). Majority of the respondents mildly agreed with the variable as indicated by a mean value ranging between 1.51  $\leq$  mean score  $\leq$  2.50 as indicated in the table above.

On the other hand, the study indicates that majority of the respondents strongly agreed that there is a financial imbalances in the schemes (Mean=1.3519 & heterogeneous standard deviation of .63120) while another majority stated that the benefits are insufficient s compared to the living standard (Mean=1.2222 & heterogeneous standard deviation of .53535). This is evidently so because the mean of the values is rated between 1.00 ≤ mean score ≤ 1.50 as indicated in the table above.

Similarly, the study conducted by the MINECOFIN (2009) affirmed that there are existing limits in the social security schemes in Rwanda grouped into four areas which are the following: small coverage, insufficient benefits; long term financial imbalances and management of different schemes in scattered institutions.

The small coverage transpires from MINECOFIN (2009:12) records showing insignificant coverage rate as the retirement pension is actually restricted to persons working in the formal sector that represent between 5.6% and 7% of the working population in Rwanda and 2.3% of the total population. Insufficient social security coverage is also explained by Barya (2011), as one of the most significant limits in pension systems of Rwanda so long as more than 90% of the population is not covered. According to MINECOFIN (2009), the schemes cover (+/-6% of active population) only the persons in the formal sector for both retirement and professional risks.

Concerning insufficient benefits as one of the limitations of the social security scheme in Rwanda there is a significant problem that the financial sustainability is not guaranteed. A 2003 actuarial report concluded that the rate of the contribution must be raised from 6% to between 8.0 and 9.5% during the 15-years period from 2003 in order to maintain actuarial and fiscal balance by 2018. A 17.7% of the contribution rate would be needed to pay all the benefits and the costs during the next 50 years; that is until 2053 (MINECOFIN, 2009).

Another fact is that there are financial imbalances in the retirees' schemes characterized by the manner the pension scheme in Rwanda is organized under a DB plan which did not make "social security an appropriate vehicle for long term savings mobilization to finance national investment" as per MINECOFIN (2009:10). Under that model, "contributions are meant to match the expenses (benefits and management fees) with a margin for reserves" (MINECOFIN, 2009: 23). A provident fund organized under a DC plan may be the perfect solution to address this limit (MINECOFIN, 2009: 29).

Further Management of different schemes in scattered institutions is also counted as one of the limit enumerated by the MINECOFIN (2009) in the social security system. The challenge is that the schemes are dispersed, expensive and not coordinated. In that regard, the RSSB Law N°45/2010 OF14/12/2010 resolved it through a gradual merger of the different branches. The first concrete move was taken in 2010 creating RSSB purported to merge CSR and RAMA with a second plan of bringing in the community based health insurance scheme within the RSSB too that has come into force in 2015 (Official Gazette no 15 of 13/04/2015). The whole essence being to ensure the risk sharing, and accountability of the newly created organization (RSSB).

Table 6 Whether retiree have medical conditions which need proper attention

	Frequency	Percent
Yes	82	75.9
No	26	24.1
Total	108	100.0

The study indicates that (82) 75.9% of the respondents mentioned that they have medical conditions which need proper attention from the doctor while (26) 24.1% stated that they do not have any special medical condition. Most of old people are vulnerable to combined various diseases such as heart disease, high cholesterol, diabetes, osteoporosis, muscle weakness, certain cancers, depression, and stroke. These are some of the common medical conditions for which routine medical checkups, physical activity and effective exercising may greatly benefit the patient.

#### Retiree's sources of income

The researcher sought to find out whether retirees have other sources of income which can facilitate them to meet their welfare need.

Table 7 Whether respondents have other sources of income

	Frequency	Percent
Yes	48	44.4
No	60	55.6
Total	108	100.0

While seeking to find out whether respondents have other source of income, (48) 44.4% stated that they have while (60) 55.6% said that they do not have other source. It is evident that majority of the retirees do not have other sources of income and the only main source is through pension benefits. In this regard, the welfare of the retirees becomes a challenge because of the small amount of money they receive. The cost of living has always increased and the income remains the same. This pushed the retirees to live in poverty.

### Sufficiency of retirement benefits to meet retirees needs

The study sought to determine whether the amount of the retirement benefits is enough to meet the amount of retirees need and the findings are indicated in tables below.

Table 8 Whether amount of pension scheme is enough to meet retiree's needs

	Frequency	Percent
Yes	19	17.6
No	89	82.4
Total	108	100.0

The study sought to find out whether the amount given in terms of pension scheme including funds to cater for the health needs is enough to meet retiree's needs and the findings indicated that majority of them who consisted of (89) 82.4% said the amount is not enough while (19) 17.6% said that the amount is enough. Majority of them once they reach 65 years start developing complications which requires regular checkup. However, considering that majority of them do not have sustainable source of livelihood, it becomes even harder to afford such regular medical condition. This affects their welfare and drives retirees to abject poverty.

## Distribution of retiree's pension in Rwanda

The study sought to determine the criteria used to distribute retirees pension in Rwanda in order to ascertain the average amount of pension received by majority of the retirees. This was important because it enables the researcher to ascertain the sustainability of pension vis a vis the current living standard. The following figure provides the details of the information sought.

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Figure 3 Range distribution of retirees' pension in Rwanda

Sources: RSSB 2016

Majority of the retirees represented by 35.2% earn pension benefits between the ranges of 5,200-10,000 francs per month. Generally, more than 90% of public servants get pension benefits that are less than 150, 000 francs per month as indicated in appendix 4 at the end of this document. It implies that the amount received by retirees as benefits is insufficient to meet their need hence affects their welfare. However, in spite of what Rwandan policy-makers considered to be a generous benefit formula, the SSFR had a bad reputation of paying low sums because of "a low level of salaries combined with the lack of indexation mechanisms [that made] the purchasing power of the pensioners to be reduced day after day" (MINECOFIN, 2009).

## Distribution of retirees' monthly expenses

The researcher sought to assess how retirees spent their monthly distribution and the details are presented in the figure below:

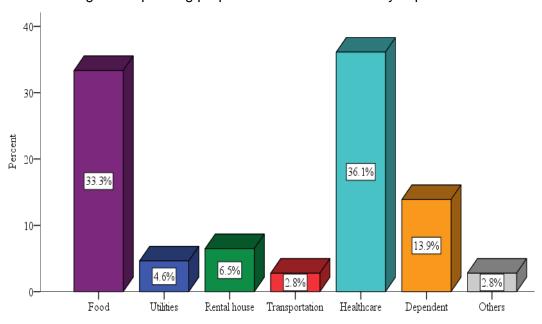


Figure 4 Spending proportions of retirees monthly expenses

The researcher also sought to assess the spending proportion of the retirees in order to ascertain the most incurred expense once they get their pension after their retirement. According to the study, it is observed that retirees spend 36.1% in medical expenses, 33.3% of the income they get is spend in food, 13.% is spend in facilitating the dependents, 6.5% in paying rent, 4.6% in other utilities, 2.8% in transport and another 2.8% in other expenses. This

indicates that most of the expenses incurred by retirees are basically health care expenses because of their vulnerability to health challenges once they reach at the age of 65 years.

Altman (2008) argues that as economies grow, the population grows with it. The older are living longer and the cost of supporting them is rising. If economies wish to reduce the substantial rise of elderly living in poverty they must employ policies that focus on ensuring that individuals save more money while they are economically active.

## Sufficiency of pension benefits

The researcher sought to ascertain the views of the respondents based on the amount they receive as pension in order to find out whether the amount is sufficient enough to meet their basic needs.

	Frequency	Percent
Very sufficient	7	6.5
Fairly Sufficient	15	13.9
Insufficient	42	38.9
Not at all sufficient	28	25.9
Undecided	16	14.8
Total	108	100.0

Table 9 Sufficiency of pension benefits to retirees in Rwanda

The researcher also wanted to determine whether the amount of compensation given to retirees is sufficient to meet their needs and the statistics indicates that 38.9% stated that the amount is insufficient, 25.9% strongly believe that the amount is not at all sufficient, 14.8% were undecided, 13.9% stated that the amount is fairly sufficient while 6.5% seemed to be comfortable with the pension benefits they get. In general, majority of the respondents stated that the amount is not sufficient to meet their welfare needs.

A significant problem arises in terms of the financial sustainability which is not guaranteed. A 2003 actuarial report concluded that the rate of the contribution must be raised from 6% to between 8.0 and 9.5% during the 15-years period from 2003 in order to maintain actuarial and fiscal balance by 2018. A 17.7% of the contribution rate would be needed to pay all the benefits and the costs during the next 50 years; that is until 2053 (MINECOFIN, 2009).

### Accessibility to medical services to retirees in Rwanda

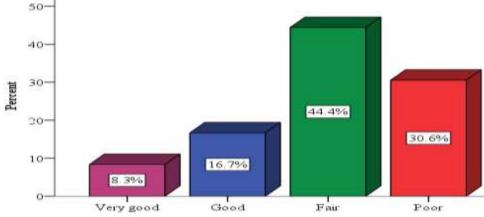
The study sought to ask this question in order to prop whether retirees are able to easily access medical services in both private and public hospitals.

Table 10 Retiree's views on the accessibility of medical services in private or public hospital

	Frequency	Percent
Strongly agree	9	8.3
Agree	20	18.5
I don't know	16	14.8
Disagree	47	43.5
Strongly disagree	16	14.8
Total	108	100.0

The researcher wanted to find out whether retirees find it easy to get medical services from both private and public hospital and the results indicates that (47) 43.5% disagreed that they easily get medical services in private hospitals, (20) 18.5% agreed, (16) 14.8% strongly disagreed with the same statement, another (16) 14.5% were undecided while a small number of (9) 8.3% strongly disagreed. This implies that in general, majority of the retirees face some challenges in accessing medical services in private hospitals. Most of the private hospitals in Rwanda do not accept the universal health insurance. Although the government had some plans to extend the coverage of the community health insurance to private health facilities, there some challenges faced as a result of low premiums charged as compared with the cost of services outside the public health system.

Figure 5 Quality of the medical service you access as a retiree



The results indicates that 44.4% stated that they receive fair services, 30.9% stated that the service they get is poor, 16.7% said that the service is good while 8.3% said they receive very good service. Article 16 of the 2015 Law governing the organization of pension schemes, the public entity in charge of pension is obliged to carry out an actuarial study for pension scheme at least once every five years.

#### Health insurance scheme and retirees' welfare

The study aimed at looking at the correlation between the health insurance scheme and retirees welfare in terms of sufficiency of pension benefits to retirees in Rwanda, easy access to medical services from private hospital, quality of retirees' medical service with regards to retirees' household dependants, medical condition requiring special proper attention, existence of any other retirees 'source of income as well as the adequacy of the retirees' allocation given in health care scheme to meet their needs.

Table 11 Relationship between health insurance pension scheme and retirees' welfare

		Sufficiency of pension benefits to retirees in Rwanda	As a retiree getting medical services from private hospital is very easy	Quality of the medical service you access as a retiree
Whether respondents have people depending on them in their	Pearson Correlation Sig. (2-tailed)	.671 <sup>**</sup>	.574 <sup>**</sup> .000	.432
household	N	108	108	108
Whether respondents have any medical conditions which need	Pearson Correlation Sig. (2-tailed)	.692 <sup>**</sup> .000	.588 <sup>**</sup> .000	.404** .000
proper attention from the doctor	N	108	108	108
Whether respondents have other sources of	Pearson Correlation Sig. (2-tailed)	.738 <sup>**</sup> .000	.775 <sup>**</sup> .000	.346 <sup>**</sup> .000
income	N	108	108	108
Whether the amount given in health care	Pearson Correlation Sig. (2-tailed)	.550** .000	.579 <sup>**</sup> .000	.284 <sup>**</sup> .003
scheme is enough to meet your needs	N	108	108	108

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The study reveals that there is a strong positive correlation between respondents who stated that as retirees they have people depending on them in their household and the sufficiency of amount of pension benefits to they receive (Pearson Correlation=.671\*\* Significant (2-tailed) at 0.001), As a retiree getting medical services from private hospital is not very easy (Pearson Correlation=.574 Significant (2-tailed) at 0.001) and those who stated that the quality of the medical service you access as a retiree (Pearson Correlation=.432\*\* Significant (2-tailed) at

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

0.001). This means that majority of the retirees who have dependents face challenges because they receive the small amount of pension benefits which they have to incur other needs such as medical services which is not easy to get good services from private hospital.

The study also shows a strong positive correlation between retirees who stated that they have medical conditions which need proper attention from the doctor and the sufficiency of amount of pension benefits to they receive (Pearson Correlation=.692\*\* Significant (2-tailed) at 0.001), As a retiree getting medical services from private hospital is not very easy (Pearson Correlation=.588\*\* Significant (2-tailed) at 0.001) and those who stated that the quality of the medical service you access as a retiree (Pearson Correlation=.404 Significant (2-tailed) at 0.001). This means that although majority of retirees may have special medical services, the amount received from the pension scheme is not sufficient enough for them, they do not afford to attend to private hospitals which provide better services and also even though they get there, the quality of the medical service they can access as a retiree is not good.

The study further indicates that there is a strong positive correlation between retirees having other sources of income and sufficiency of amount of pension benefits to they receive to meet their welfare needs (Pearson Correlation=.738" Significant (2-tailed) at 0.001), As a retiree getting medical services from private hospital is not very easy (Pearson Correlation=.775 Significant (2-tailed) at 0.001) and those who stated that the quality of the medical service you access as a retiree (Pearson Correlation=.346\*\* Significant (2-tailed) at 0.001). Finally, the study observed that there is a positive correlation between amount of pension given in health care scheme is to meet your needs and the sufficiency to meet retirees welfare (Pearson Correlation=.550\*\* Significant (2-tailed) at 0.001), As a retiree getting medical services from private hospital is not very easy (Pearson Correlation=.579\*\* Significant (2-tailed) at 0.001) and those who stated that the quality of the medical service you access as a retiree (Pearson Correlation=.284\*\* Significant (2-tailed) at 0.001).

### Structure of Health Scheme and how it operates and contribute

The study reveals that the general majority of the retirees in Kigali used to work in public sector. Individual workers are eligible for a monthly pension at the age of 65 years and individual can retire at the age of 55 when he/she has contributed for at least 15 years (Art. 124 of the Law on General Statutes of Rwandan Public Service). The study reveals that 93.5% stated that they retired before the age of 65 based on the previous law amended by the recent one of 2015 while 6.5% mentioned that they retired after the age of 65 as per the new law of 2015 that extended the retirement age to 65. Individuals are eligible for a monthly pension at the age of 60 if they have accumulated 15 years of service, or at age of 65.

Majority of the retirees consisting of 84.3% of the respondents stated that they are registered in public pension scheme, 10.2% said that they have private occupational voluntary and 5.6% said that they are registered in private personal voluntary pension. This implies that majority of the retirees who used to work in public formal sector access public pension scheme with its affiliated health care scheme, RSSB Insurance scheme for those who retirement is dated 2003 & MMI for defense forces since 2015. The rest of retirees from the private sector occupational and personal voluntary scheme remain with the only option of CBHIS with restricted benefits from the public hospitals or related transfers long process.

### Limits of the existing social security systems

The study revealed that that many workers were unable to contribute a relatively high percentage of their incomes since they had other urgent needs. Many people feel less need for pensions, as for many of them old age appears very remote and the idea of retirement perhaps unreal. The study also indicated that majority of the workers are reluctant to contribute because they were either unfamiliar with social security schemes or distrusted the way they were managed. On the other hand, the study indicates that majority of the respondents strongly agreed that there is a financial imbalances in the schemes This is evidently so because the mean of the values is rated between  $1.00 \le \text{mean score} \le 1.50$  as indicated in the table above. Similarly, the study conducted by the MINECOFIN (2009) affirmed that there are existing limits in the social security schemes in Rwanda and these limits were grouped into four areas which are the following: small coverage, insufficient benefits; long term financial imbalances and management of different schemes in scattered institutions. Following that analysis, the ministry formulated some recommendations for the development of those different areas.

Other challenges include insufficient social security coverage as explained by Barya (2011), one of the most significant limits in pension systems of Rwanda is that more than 90% of the population is not covered. According to MINECOFIN (2009), the schemes cover (+/- 6% of active population) only the persons in the formal sector for both retirement and professional risks.

The study also observed that the benefits are insufficient; with a significant problem that the financial sustainability is not guaranteed. A 2003 actuarial report concluded that the rate of the contribution must be raised from 6% to between 8.0 and 9.5% during the 15-years period from 2003 in order to maintain actuarial and fiscal balance by 2018 (MINECOFIN, 2009).

Finally, it was revealed that that the social security system is dispersed, expensive and not coordinated. In that regard, the RSSB Law N°45/2010 OF14/12/2010 resolved it through a gradual merger of the different branches. The first concrete move was taken in 2010 creating RSSB purported to merge CSR and RAMA with a second plan of bringing in the community based health insurance scheme within the RSSB too. That is effected by now the 2017/2018 CBHIS contributions have started to be collected by RSSB given the fact that since 2015, RSSB also manages the Mutuelle de Santé/CBHI scheme. The whole essence being to ensure the risk sharing and accountability of the newly created organization (RSSB).

#### **CONCLUSION AND RECOMMENDATIONS**

The retirees current eleven years old national association (ARR) with members throughout the country should be sensitized to mobilize its own savings so that in the long run they may be empowered to fund the special welfare needs of retirees. Such kind of large scale saving model would permit to partner with the related public actors to top up on the basic schemes provided by the government pension and medical schemes.

It transpired that there is an existing regulatory framework the Ministerial instruction No 002-11-10-TC of 24-05-2011 governing Health Insurance of old age pensioners providing room for RSSB insurance scheme for all retirees that is not yet fully implemented. The study therefore recommends that RSSB may take full charge of retirees as it is currently combining the management of pensions and the medical insurance. Hence the scheme of deducting 7.5% on retiree's pension should be opened to every retiree. It should also be maintained even upon the death of the retire for the surviving spouse willing so as long as the pension is still disbursed instead of terminating the medical scheme cover.

Further, it was observed that majority of the retirees are male. This means that majority of the female are locked out of the formal jobs. It implies that there is a need to increase the proportion of the female in the labor force participation to solve the problem of financial unsustainability. Many women in Rwanda bear the burden of taking care of both their children and the old people in their family. The government has to create more opportunity for part-time jobs because those female cannot work full time due to the responsibility they have at their own home. A combination of increases in labor force participation by women and a better distribution of woman employees across occupations and economic sectors can contribute to economic growth of Rwanda. Opportunities arising from economic growth would contribute to the reinforcement of social security systems, through increased participation of a higher number of workers. The government of Rwanda has to create opportunities for workers in the informal sector through job creation but also by encouraging people to adhere the cooperatives. Once a larger proportion of the population adheres to cooperatives, adherents will be able to pay the taxes or to save for their retirement. In that regard the informal sector adhering to the cooperatives will turn it into the formal regime. Subsequently those cooperative members will be

able to plan and save for their retirement as well as paying taxes enabling the government to attain the sustainable development goal of universal health coverage.

Finally through the retirees current eleven years old national association (ARR) with members throughout the country should be sensitized to mobilize its own savings so that in the long run they may be empowered to fund the special welfare needs of retirees. Such kind of large scale saving model would permit to partner with the related public actors to top up on the basic schemes provided by the government pension and medical schemes.

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