The income replacement ratio and its influence on pension choices in South Africa

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in fulfillment of the requirements for the degree of Master of Management

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Johannesburg, August 2015

ABSTRACT

It is estimated that millions of workers in South Africa do not save enough to have adequate pension upon retirement, in spite of the impending risk of increased longevity. Knowledge gaps in the contributory pensions market in terms of how income objectives of retirement plans are met confound the risks. Defined as how much of the final salary the pension benefit will replace; the income objective or income replacement ratio (IRR) is an explicit statement of benefits payable as a percentage of pre-retirement income and an important indicator of performance.

Many contributory retirement plans are facing the problems of benefit adequacy in the face of aging populations/membership. There are differences in how the benefit adequacy is measured. Most studies point to the high costs and the lack of regulation of the different components of a universally accepted income replacement measure as contributing to these problems. This paper sets the conditions around these issues and discusses the thinking around pension designs in terms of parameters that have to be optimised.

The main conclusions are that the runaway costs render the system unsustainable and the absence of effective measurement systems compound the issue. While economic growth is capable of offsetting some of the costs associated with pension system the debate is now focused on active management of costs in the system value chain. Mandatory contributory pension is an option to manage these costs. With compulsion it is assumed that the government would administer part of the system, with some of the system costs to be financed from general tax revenues.

The IRR enquiry takes place in the context of information gaps in the private pension system that disempowers the contributors with the results that run-away cost, irrational decision making in the system and complex choices are commonplace.

The paper provides theoretical tools for assessing the effect of performance optimisation measures which affect pension choices and must be optimised to bring about the desired outcomes in contributory pension system. These are: contribution rate, benefit preservation, investment returns, cost management and, to some extent, the education of the members of pension schemes.   Collectively these different components contributes to a unified the unified measure namely IRR.

DECLARATION

I, Ngoako Bopape, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in fulfilment of the requirements for the degree of Master of Management in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

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(Ngoako Bopape)

Signed at …………………………………………………

On the …………………………….. Day of ………………………… 2015.

DEDICATION

This research report is written as an addition to the multiple voices sounding a warning of imminent crises in the world of social security and in support of reform policy in South Africa.

ACKNOWLEDGEMENTS

Thank you to those who participated in this research and freely gave of their time and information to allow the compilation of this research report. Unfortunately these participants have not given the green light to reveal their identities.

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GLOSSARY OF TERMS

ADEQUATE BENEFITS	is about affording retirement but it is not expressed as a percentage like income replacement ratio (IRR).
DEFINED BENEFIT	is a type of retirement scheme in which an employer or sponsor makes a promise to pay a member a specified monthly benefit upon retirement expressed as a formula based on earnings history and service period.
DEFINED CONTRIBUTIONS	is a type of retirement scheme in which an amount or percentage is set aside each year for the accrual of retirement benefits for a member.
FULLY FUNDED	this term refers to a pension fund that has sufficient assets needed to provide for members' accrued benefits.
INCOME REPLACEMENT RATIO	this refers to the percentages of members' pre-retirement income pay-out by a pension fund upon retirement.
INTERNAL RATE OF RETURN	is the average annual return earned through the life of an investment.
LIFE ANNUITY	is an insurance product in which the annuitant receives a series of future payments for his/her lifetime after retirement.
NORMAL RETIREMENT AGE	this is the age at which members can receive full retirement benefits upon leaving employment.
PRESERVATION	a requirement that money saved through a pension of provident fund remain in the system

	when members change jobs without incurring tax or penalties.
REDUCTION IN YIELDS	the effect charges and fees has on investment over a period expressed as a percentage.
RETIREMENT FUND	is a legal entity, separate from its sponsor, established to facilitate the investment of monetary contributions made by the employer and/or employees. it is also known as plan, scheme, or program and most prominently marketed as a pension, provident, retirement annuity, preservation fund or deferred plan.
TOTAL EXPENSE RATIO	is a measure of the total cost of a fund to a member.
UMBRELLA FUND	is a type of pension plan that exists as a single legal entity but has sub-funds which trade as separate entities.

ABBREVIATIONS

AFRF	-	Alexander Forbes Retirement Fund
DB	-	Defined Benefits
DC	-	Defined Contributions
FSB	-	Financial Services Board
GN18	-	Government Note 18
IRR	-	Income Replacement Ratio
LRA	-	Labour Relations Act
NRA	-	Normal Retirement Age
OMSF	-	Old Mutual Super Fund
PFA	-	Pension Funds Act
RFLIPF	-	Road Freight and Logistics Industry Provident Fund
RIY	-	Reduction in Yield
S13B	-	Section 13B of the Pension Funds Acts
TER	-	Total Expense Ratio

CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to explore the knowledge of pension replacement ratio on the behaviour of contributory pension plan members.

1.2 Context of the study

Retirement in the South African contributory retirement system is a daunting prospect. Global trends show the average person changes jobs five to eight times during their working lives, as noted by Cascio (2001), that soon workers will hold 7 to10 jobs during their working lives. Job hopping no longer holds the same stigma as it once did. It is reported that 80% of the job hopping employees liquidate their accumulated retirement benefits upon changing jobs. Gordon, M. S., Mitchell, O. S., & Twinney, M. M. (1997) estimated that between the ages of 18 and 30 the average number of jobs held is 7.5. The result of these trends is a sub-standard pension income replacement ratio of 13.1% in South Africa, accompanied by a reduction in standard of living. By way of contrast an Organisation for Economic Co-operation and Development (OECD) (2011:118) report shows that countries in its jurisdiction recorded median rate upwards of 60% IRR for all earners.

Maintaining a pre-retirement standard of living has to take into consideration that while a decision to purchase an annuity can improve economic outcomes for elderly widows Johnson, R. W., Uccello, C. E., & Goldwyn, J. H.(2005:27) affirms an old social security wisdom that “joint and survivor annuities also reduce retirement income and consumption levels when both spouses are alive”. The couple incurs a cost in favour of protection against the possibility of outliving their resources. The link between these sets of circumstances for annuities and the declining economic benefits in old age is traced back to a lack of preservation, an issue I shall return to in more detail. Annuities are subject to the consensus view that the objectives of pension systems are prevention of old-age poverty and smoothing consumption profiles over a person’s post-retirement lifetime. Indeed annuities have general support when Butler *et al* (2013: 191) reassert that “life annuities are preferable for risk-averse pensioners and that income drawdown accounts are more suitable for pensioners with lower risk aversion”. However annuitization has fallen victim to the high costs in a context shown by Brown

(2001) that annuities can lower the rate of return enough to more than offset the benefits of annuitization.

Annuities therefore partly explain benefit adequacy or the lack thereof. Linked to annuities are investment activities of a retirement plan over time. With prudent investing Andrew (2004) has shown that real annual returns in the order of 4.25% were achieved over an extended period is possible. From an investment point of view cost factors increase the investment risk and work against the achievement of a 4% net return, a level deemed necessary to achieve an adequate IRR. Therefore, a discussion of investment returns in the context of IRR should reflect a form of “inflation insurance” to use Bodie’s (1989:32) concept. Linked to inflation insurance is Disney and Johnson’s (2001) concept of pension salary indexation. This measure is important in terms of “how earnings are re-valued at retirement in order to calculate the initial pension level; and how rapidly benefits increase once they are in payment”. The re-valuation strategy, whether earnings averaged over time or the reference earnings of the last working month of a pensioner, remains a key pension risk and may contribute to old age poverty when salaries are too low. If pension increases are indexed to prices the cost of providing a pension should drop substantially over time as a proportion of the pension system. For Bikker and De Dreu (2007) the above issues are the contradiction between IRR and system costs demonstrated when an increase in annual operating costs of 1% of pension fund assets implies a cumulative reduction of 27% of eventual pension benefits or, equivalently, an increase of more than 37% in pension costs. Anecdotal evidence suggests the extent of “low contributions, low expected investment returns, climbing annuity prices and a culture of low preservation” (Alexander Forbes Benefits Barometer 2013, Butler et al) all undermine the system.

1.3 Problem statement

1.3.1 *Main problem*

The contributory pension system does not have a standard performance measures in South Africa. The result is that the widely accepted IRR measure is not only irregular across schemes but it is not visible to the member who should use the measure to seek accountability and manage costs. That the schemes are expensive in South Africa can be traced back to this aspect. The scheme expenses are a result of both the autonomy the schemes are allowed to decide on services they use and the flexible regulatory environment governing the system.

A combination of these factors has seen pension beneficiaries receiving less in benefits at retirement but having met lots of expenses during their working lives in order to get adequate benefits.

The variability of IRR has meant that benefits vary for beneficiaries who display similar job profiles over time.

In this context it is opportune to conduct an in-depth normative analysis to demonstrate the conditions and behaviour patterns which drive IRR. This would show the difference between the obligations of a contributory pension system and available resources to finance it. A voluntary system is possibly not ideal. For instance Asher (2007) notes that South African law does not currently require compulsory contributions to retirement funds, but the idea is frequently discussed and was recommended by the Taylor Committee.

Indeed legislation is important. A review of classical literature on pensions reveal that arrangements whereby the accrued pension rights of a person with substantial service may be preserved on a change of employment, including movement between the public services and private employment, are in the "general national interest" as noted by Spratling, F., Bacon, F., & Bromfield, A.(1957:182). In South Africa, Andrew (2004:38) recorded that the historical attempt at mandatory preservation, to preserve contributions, that "in 1980 a draft bill on pension preservation attempted to stop leakage" but failed. Why is preservation vital as evidenced in classical and recent literature? Does a contributory system partly depend on it?

1.3.2 *Sub-problems*

a). *The first sub-problem is the costs associated with the contributory pension system. On establishment a pension plan is saddled with high administration costs and liabilities which more than offset the costs of running the systems but the costs also result in huge capital getting out of the system instead of paying benefits.*

b). *The second sub-problem is that in a contributory pension system that is voluntary differentiated eligibility criteria apply. Linked to the lack of standardised eligibility conditions are problems in which pensions pay-out are dependent on contributions and investment returns.*

1.4 Significance of the study

The paradigm shift from DB to DC, a topic I return to later, was driven largely through the market, while Andrew (2004) notes the trade-union movement was strongly in favour of this shift in South Africa, is a significant moment in the pension system.

The moment was observed by pension experts Zelinsky (2004:462) and other authorities as "the stagnation of defined benefit (DB) pension and concomitant rise of defined contribution (DC) pension plans".

As shall be seen later, a beneficiary's pension benefit in the DC system hinges on investment returns generated by a collection of investment managers whose entry into the market coincided with the paradigm shift.

According to some, this phenomenon presented a new type of market failure. Gill, I. S., Ozer, C., & Tatucu, R. (2008:66) observed that multiple managers lose the advantage of economies of scale when huge pension resources are "spent on advertising and sales commissions", something that a mandated system can be expected to evade. These and other costs in the system, which earned a rebuke from observers Holtzmann and Palmer (2003) that the majority of pure funded defined contribution schemes in poor countries have failed continue to raise questions about the performance of the private pension industry.

It is interesting that a pension system, shown through a corpus of anecdotes and other literature to generate inadequate benefits, has survived this long. Policy has been slow to adjust. It is possible that poor decisions by members of the public are neither rational nor informed (Harrison, T., Waite, K., & White, P. (2006).

Information seems to be a factor contributing to poor decisions. It is not just the *flow* but the *processing* of information that is important Harrison et al (2005). It is an objective of this research to generate useful findings sufficient to inform interventions that address these potential failures.

1.5 Delimitations of the study

Due to the limited scale of the research in using only a small sample and the use of a case study, a non-probability method, in collecting the data, the result of this study may not be generalized.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

The literature looks at the size and coverage of the contributory pension system in South Africa as reported by Stewart and Yerno (2009). Some anecdotes from the Financial Services Board (FSB) corroborate results and findings in the above study through information published in its annual reports. Disney and Johnson (2001) offer a working legal definition of a pension organisation (also known as a plan, scheme, program or fund). The trust legal structure involves trustees managing pension assets on behalf of beneficiaries. A right is earned only when the member contributes. The rights philosophy on the other hand is fundamentally different from a trust-based because rights are earned through birth. While the trust system enjoys support and goodwill, including support by low-wage-earners of society as reported by Valdes-Prieto (2008), it is also questioned for its under-performance on governance by Stewart and Yerno (2004) in terms of non-availability of sufficiently trained trustees. The questions about the system's cost-efficiency were raised in a separate Stewart and Yerno (2007) study and many other studies referred to in this report. Harrison et al (2005:5) found in a study of pension purchase decisions that consumers are oblivious to the risks of "increasing exposure" to longevity. Here, too, is a sharp question about system performance.

These risks are shown, in a Sunden (2003:325) report, to undermine the one truly transparent performance measure, namely the IRR which is described as "simpler and conducive". The definition of IRR offered by Butler and Van Zyl (2012:33) describes it as the "ratio of annualized income in the month after retirement to salary for the year prior to retirement". In the DB system a working formula, such as that discussed in a Bodie et al (1988:24) study of various pension systems, "the employee receives 1% of average salary times the number of years of service" in terms of a pre-defined formula.

In terms of the problems of regulation the voluntary nature of the system is lamented as there is no evidence of compliance with international standards such as International Labour Organisation (ILO) Convention 102 which argues for minimum replacement rates of 40%. Asher (2007) argues that South African law does not currently require compulsory contributions to retirement funds, but the idea is frequently discussed and was recommended by the Taylor Committee.

Indeed an older but useful OECD (2011:118) report suggests system under-performance at a “median replacement rate of 13.1%” compared to a recorded “median replacement rate of 60%” in countries in its jurisdiction. Research from South Africa shows a replacement of 28%. Although there are differences between the rates their commonality derives from the fact of sub-standard performance against the ILO rate.

Jurisdiction of the study by OECD is a material issue; however the 13.1% rate is not only useful, but also provides insight and possibly confirmation of impending crises raised by some. The parameters of IRR are discussed, starting with the classical issue of pension preservation as discussed by Spratling et al (1957) to the effect that preservation will benefit the nation as it does the members. The literature shows a contribution rate in line with the 10-13% contribution rate advocated by the World Bank can contribute to minimum 40% IRR. A study of the Chilean model by Arenas de Mesa et al (2006:2) suggests the “lack of knowledge may possibly explain participation and other choices related to the system” by a specific profile. It seems these important parameters have fallen by the wayside with the advent of the Chilean contributory pension system pioneered with the shift from defined benefit to defined contribution and observed by Zelinsky (2004) and other authorities as the stagnation of defined benefit (DB) pension and concomitant rise of defined contribution (DC) pension plans. The preservation of pension rights or benefits is vital to the very survival of the system in South Africa. Andrew (2004) refers to the historical attempt in South Africa to stop the leakage. Preservation concerns arise from frequent change of employment and in turn the need to keep the benefits in the system; a report by Cascio (2001) posits that the stigma of job hopping has been shed and that soon workers will hold 7 to 10 jobs during their working lives. More aggressive job hopping data was garnered through Gordon et al (1997) which showed between the ages of 18 and 30 the average number of jobs held is 7.5. This is not good for the preservation efforts and possibly a case for enforced preservation.

At exit point a pension beneficiary’s IRR is affected by the cost of annuities. As reported in a Johnson et al (2005) study annuities can reduce retirement income”, and Brown (2001) that annuitization can lower the rate of return enough to more than offset the benefits of annuitization. For Bikker and Dreu the IRR is most undermined by operating costs, where an increase of 1% on pension fund asset implies a cumulative reduction of 27% of eventual pension benefits or, equivalently, an increase of more than 37% in pension costs.

Alternatively an additional 1% total expense ratio on retirement plans assets contributes to a reduction in yield calculated as 2.43% in a research by Rusconi (2004).

While the age parameter is just as important, both at entry and exit points, it was observed to be on the decline in an anecdotal study by Alexander Forbes Butler, M., Cabot-Alletzhauser, A., Prinsloo, M. (Eds). (2013).That an average retirement fund industry age of 63.3 in the Alexander Forbes study shows decline poses further risk to the age parameter which forms part of the IRR assumptions. In an increasing life expectancy environment it is imprudent to decrease retirement age when the system and individual retirement funds need more contributions.

The issues related to particular parameters are compounded by potential agency problems or conflict of interest in the industry as noted by yet another Stewart and Yerno (2008) governance report and confirmed by Gill et al (2008) with the observation that pension resources are spent on advertising and sales commissions. The additional system leakage let Holtzmann and Palmer (2003:317) to comment that the majority of pure funded defined contribution schemes in poor countries have failed.

Andrew (2004) makes the point in a study of pension investment returns in which the study found a net return of 4.25%. It is now generally accepted that prudent investing of pension assets should yield a real minimum return of 4% achieved over an extended period. This rate of return is a vital ingredient in achieving the objectives of IRR. Bodie (1989:32) coined the term “inflation insurance” in reference to the relationship between real returns against the effect of inflation.

The result of these, and many other issues, has been that public policy (which seeks to incentivise participation in the contributory pension system through a mixture of beneficial tax rules i.e. exemption from capital gains tax and tax-free lump sum payment) is systematically undermined. The result has been a response by individuals who purchase additional retirement annuities, albeit reluctantly, to augment their company pension plans at a very high cost.

2.2 Background discussion

Adequate pension or IRR is defined by Butler and Van Zyl (2012) as the ratio of annualized income in the month after retirement to salary for the year prior to retirement. In a DB plan the formula for pension pay-out is a function of the reference wage or salary, years of service and an accrual rate.

In general DB salaries are calculated using career-long averages or averages of a predetermined number of years. While rates of salary increases may vary, the measurement or guaranteed rate payable to a pensioner is usually guaranteed by the employer. DC plans on the other hand use contributions plus investment income or market performance formula, except that the pension pay-out is conditional upon market conditions. The risk of market under-performance accrues to the member.

In 2004 Stewart and Yerno (2009) report there were 13,700 registered occupational pension plans in 2004 with almost 9 million members and R1 trillion in assets. In 2013 the publicly available FSB data shows 15 255 875 million members, a 59% increase in almost 10 years.

The FSB statistics corroborate the assets report in terms of the size of the South African retirement industry which has grown to be well over R2.7 trillion as at 2012, and 3.2 trillion in 2013 - covering over 15 million members. With a few exceptions outside the scope of the report, most notably the non-complaint entities, the majority of retirement plans are regulated through the Pension Funds Act 1956. State entities falling outside the ambit of the FSB statistical data report on a voluntary compliance basis.

The Act had the effect of what Disney and Johnson (2001:15) describe as a “separate trust fund status of pension assets common in the Anglo-Saxon countries” run by Boards of Trustees. In the Steward and Yerno (2009) report some 2.5 million individuals have membership of retirement annuity funds (individual retirement plan) to make supplementary contributions towards retirement. Contributory or funded plans under the Act are preferable in order to guarantee ownership or beneficial rights to pension plan members. Given the significant supplementary contributions above it is clear that there is enough support and goodwill in the system from different sectors of society.

It is interesting that Valdes-Prieto (2008) found the assertion that poor people never save for old age because their current needs outweigh any gain from saving for the long-term is not supported by evidence. Instead it seems that the high costs of administration which low-wage workers often cite for their non-participation in the system better explain the weak connection between contributions and benefits. The goodwill which is evident in the system needs reciprocation through good governance and cost efficient structures.

In a Stewart and Yerno (2007) study it is reported that about 80% of funds have less than 100 members, which raises concerns about the availability of sufficiently trained trustees to govern these funds and the cost-efficiency of such arrangements for the members within these funds.

It is estimated that millions of workers do not save enough to have adequate pension upon retirement, in spite of the impending risk of increased longevity. Harrison et al (2005:5) found in a study of pension purchase decisions in the UK that “consumer ignorance of the implications of increasing exposure” to this risk is on the increase. Moreover there is evidence to show that risks do undermine the potential to introduce the language of IRR which, as Sunden (2003) noted, is simpler and more conducive to better retirement decision making.

2.3 Voluntary Nature of the System

We now know from Asher (2007) that the nature of the South African contributory pension system is voluntary, with many retirement plans able to establish their own performance measurements. The replacement rate is a measurement used by many and is calculated based on gross salary income since pension income is taxed. Since salaries are determined in the labour market, the levels of pension contributions and payments are therefore exogenous to the pension system. A mandated system should be able to standardise these issues.

In terms of the ILO Convention 102, 40% income replacement rate should be payable through the old age contingency. The intention of the ILO Convention is to specify the standard IRR provision that, at a minimum, should be accessible to everybody. Progress towards higher levels of protection would be left to national policy through the abolition of the voluntary nature of contributions and the introduction of a fully mandatory contributory pension system, or partly mandatory system that enforces certain vital parts of an otherwise voluntary system.

The calculation of the rate is broadly in line with its definition as gross pension entitlement divided by gross pre-retirement earnings. Its application involves the revaluing of earnings over a lifetime so that it is identical with individual final earnings.

2.4 High Administration Costs

The mix of risks documented by Alexander Forbes captures the essence of the IRR debate, the need for further analysis and, the need for general adjustments of some assumptions (age, investment, cost and annuities) given declining economies and aging population risks. Any system adjustments should take into consideration the need for performance measurement of the system.

Indeed the aspiration contained in the South African constitution to progressively realize coverage, suffers under the lack of income replacement objectives.

It is not known what the effect of the invisibility and knowledge of IRR is on pension choices and whether it affects behaviour on the part of those who have to make decisions about contribution rates paid into pension plans and the effects thereof. The on-going management of risk factors which have adverse effect on income targets in the post-retirement period is critical. This report explores the extent to which adequate replacement rates are a result of poor understanding of its significance, and the decisions required for the achievement of an adequate income in retirement/old age, and therefore no behavioural changes occur.

Behavioural changes would involve contribution increases, sufficient preservation of accumulated savings and the selection of better priced pension arrangements. The link between behaviour change and knowledge was demonstrated by Chilean Arenas de Mesa *et al* (2006) study of the Chilean pension reforms which found that the lack of knowledge may possibly explain participation and other choices related to the system, as well as whether the system favours certain types of people over others.

In most jurisdictions the non-preservation of pensions on changing jobs is attributed to an under-estimation of their life expectancy and inertia. Therefore, the discussion of preservation as it affects the pension outcome as measured through IRR is vital. A review of pensions by Spratling *et al* (1957) reveal the need in which for accrued pension rights of a person with substantial service may to be preserved on change of employment, including movement between the public services and private employment. Andrew (2004) noted the historical attempt at preservation that in 1980 a draft bill on pension preservation attempted to stop leakage but failed.

Global trends indicate that the average person changes jobs five to eight times during their working lives as noted by Cascio (2001) soon workers will hold 7 to10 jobs during their working lives without incurring society’s stigma as it once did.

It is reported that 80% of these employees liquidate their accumulated retirement benefits upon changing jobs. Gordon *et al* (1997) estimated that between the ages of 18 and 30 the average number of jobs held is 7.5. The result of this trend is the most inadequate income replacement of 13.1% in South Africa accompanied by a reduction in standard of living.

Maintaining a pre-retirement standard of living has to take into consideration that while annuities can improve economic outcomes for contributors Johnson *et al* (2005) affirmed that joint and survivor annuities also reduce retirement income and consumption levels when both spouses are alive. The couple incurs a cost in favour of protection against the possibility of outliving their resources. This is the case for annuitization and its economic benefits in old age. In this was the consensus view that the objectives of pension systems are prevention of old-age poverty and smoothing consumption profiles over a person's lifetime is reinforced. Indeed life annuities (the buyer receives a series of future payments) have general support when Butler, M., Hu, B., & Kloppers, D. (2013) re-asserts that risk-averse pensioners prefer them and that income drawdown accounts provide much needed income security.

However, annuitization has fallen victim to the all-consuming cost factor in the context defined by Brown (2001:30) that annuities "can lower the rate of return enough to more than offset the benefits of annuitization".

As reported elsewhere for Bikker and De Dreu (2007) the issue is the contradiction between IRR and high TER. High TER invariably impact investment outcomes in terms of valuations, interests and the compounding effect. The performance of the cost variables partly explains the pension outcome.

The general lapse in governance systems has added a dimension to a developing poverty crisis in old age. Good governance in pension plans is described in the literature by Stewart and Yermo (2008) by its objective which seeks to minimize potential agency problems, or conflict of interest, that can arise between fund members and those responsible for the fund's management.

It seems that a good investment strategy is required as part of good governance which, to Stewart and Yermo (2008), has the potential to enhance investment returns from a financial services industry suffering from a conflict of interest between its own profits and members' interests.

It is imperative therefore that the research explores members' access to information about the IRR measurement in contributory pension systems. Their awareness of each of the elements of the measure would normatively predispose them to the misalignment of costs, poor investment returns, poor contribution rates, non-preservation on the one hand and the ultimate impact of the misalignment with the unitary IRR measure.

2.5 Conclusion of Literature Review

The literature supports an argument that the invisibility of IRR results in poor information processing needed to measure the effectiveness of the system and to help contributors estimate their income upon retirement. Indeed the literature suggests a set of behaviours and provides specific performance measures which must be visible to members to facilitate informed choice. The absence of mandatory pension systems for all productive labour underlines potential old age pension crises. Where pensions are not mandated performance become an issue as, some vital system performance elements such as the IRR fall by the wayside.

CHAPTER 3. RESEARCH METHODOLOGY

The research strategy involves a qualitative approach that investigates knowledge of IRR to sketch the conditions around this measure in a contributory pension system in South Africa. A case study is followed as the most appropriate for the research strategy. Since a qualitative study does not lend itself to representative samples, this presupposes a small sample. The research instrument chosen for this study is interviews through face-to-face or telephonic interactions, or a combination of these data collection methods. Methods used in the analysis and interpretation of data are discussed to orientate the reader to some of the thematic coding and analysis involved. The limitation of the study, emanating specifically from the sampling, is discussed in this chapter.

3.1 Research paradigm

In this research report the general retirement planning theory and practice is limited to the key topics around contributory systems;: specifically the defined contribution variety. The choice of retirement paradigm is informed by the relative decline of DB funds and concomitant growth of DC systems.

A deductive approach forms the basic theoretical context for the research. This is broadly in line with understanding social action in its context. Existing knowledge about the subject is surveyed through a literature review of qualitative designs. The link between theory and practice is also qualitative. Those following a quantitative methodology could conduct similar research specifically to address the issue of theoretical relevance.

As a qualitative researcher and, in conformity with ethics of research, I have values and interests in the retirement industry which form part of my social being and these may influence the research to an extent. An objective of this study is to provide a contextual analysis of the conditions which lead to behaviour at odds with income objectives manifested when IRR is not visible. The need to explore the values and knowledge levels of the research subjects promises to generate insights no other method can probe in comprehensive detail, hence an exploratory research design is considered appropriate.

The quality of research subjects, acting within specific contexts, their reasons, decisions and subsequent actions needs to be explored.

3.2 Research Design

The problem of aging populations cannot be responded to adequately through a private pension system with no clear performance measures as noted by Stewart and Yermo (2009). The high TER associated with the system, the low contribution rates, expensive annuitization, investment returns and the resulting replacement rates will be documented in this case study from a member's point of view. The case study method has the potential to create a picture of the general conditions which produce the pension outcomes described in the literature as sub-standard. Since the pension outcome is affected by the policy framework, an analysis of the policy environment will form part of the pension conditions through the prism of the members and/or their representative.

The need to understand the theory behind retirement plan parameters forms part of the conditions which the case study design promises to capture in rich description. The description will be generated through an in-depth discussion with specific actors in the pension value chain. The assumption here is that individual contributory pension schemes are part of specific contexts and as such present unique behavioural characteristics and viewpoints which need to be captured in the study. The literature surveyed also followed qualitative methods. Hence a research schedule, not a close-ended questionnaire, was designed to guide the interview process to allow probing and follow-up questions.

The subject of this research lends itself to both qualitative and quantitative methods and to the extent possible a limited mixed methods triangulation strategy was utilised, not only as part of the validation process, but to acknowledge historical origins of contributory pension from its actuarial beginnings.

The interview process has important characteristics for a qualitative study such as this one. It is flexible and can evolve with the interview process. It holds out the promise of a rich empirically-based description and understanding of pension performance measurements. This type of flexibility has limited applicability with other designs.

3.3 Population and sample

3.3.1 *Population*

A case study, such as an exploration of the conditions which produce certain behaviours in a contributory pension system, lends itself to a fairly small sample. The sample for this study was deliberately small with scheme officials in the private pension system as the target population and the method purposeful sampling.

Purposeful sampling is non-probable and therefore a large portion of the unit of analysis did not have an opportunity to take part. The strength of a small sample lies in the fact of its size and it also allows the researcher to learn the most through the art of understanding and insight. The small sample nevertheless represented schemes of substantial size (see below).

3.3.2 *Sample and sampling method*

Case Site (for Case Study)

Statistics and some anecdotes used in the literature review were gleaned from documents produced by contributory pension administrators, Alexander Forbes and Old Mutual. The administrators feature in the Registrar of Pension Funds Annual Report for 2010 in the categories Top 100 FSB Registered Funds Ranked by Total Assets as reported in the FSB Annual (2010) and Top FSB Registered Funds Ranked in order of Membership. In terms of the FSB report Alexander Forbes has a membership of 170,717 and assets under management valued at R19 billion. This is just in the multi-employer pension plan registered as Alexander Forbes Retirement Fund (AFRF).

Old Mutual, on the other hand, has membership of 269,352 and assets totalling R11 billion on SuperFund Umbrella Plan registered in its name. Together they control 32% of assets under management in the top 100 category and 19% of membership in the top 100 category. On account of the FSB report the statistics provide a fairly broad membership base and influence in terms of assets and broad representation. Moreover the categories top 100 by assets and membership in the FSB report were useful in side-stepping the issues raised above that about 80% of the industry’s plans have fewer than 100 members. The smaller plans lack critical mass and are more costly to study.

The researcher approached management and senior leadership team representatives of the above institutions to garner insights beyond the literature through qualitative interviews. Most administrators in the South African contributory pension market have investment divisions (as consultants or investment managers) in their organisations. These resources would be useful for the inquiry about investment activities of asset managers and the net returns they generate as part of pension funding.

Although the retirement scheme was studied as a single legal entity registered as such with the FSB, the possibility of rich data forthcoming from the administration platforms was immense since they have a myriad of employer groups under administration. Thus many experiences emerging from individual groups. The above sample satisfied the requirements of *maximum variation* since they exhibited the most characteristics of the contributory pension system and the fact that a single administrator has a view of different plans for a host of employer groups.

Principal officers (PO) are defined in the Pension Funds Act of 1956 and were approached to get a view from a variant retirement plan's point of view. POs are officials of the pension organization and are extensions of the boards of trustees. Preferable interviewees would have been the POs from the non-umbrella retirement plan variety. An umbrella plan is defined as a single legal entity, but includes distinct sub-plans which trade separately in terms of special rules (e.g. special rules provide for individual contribution rates) but trade collectively in terms of general rules (e.g. general rules provide for a single board of trustees which exercise overall oversight). A PO is an integral part of pension plans and represents the public face of contributory pension systems in terms of the letter and spirit of the law. The law which gives rise to this role provides that the officials should be conversant with most, if not all, of the business of a pension plan and legislative provisions.

While legislation provides for the use of professional advisors, where officials of the pension plan exhibit knowledge gaps, the PO remains the main channel for the flow of information.

In this way the officials get exposure to knowledge, in this case the pension theory framework, to make up for what they might lack. The officials are the primary link between the pensions plan itself and fund administrators. For the purpose of this study, interaction with the authorities was limited, specifically the National Treasury (NT) and FSB, to document analysis for which they are responsible and which are referenced in this study.

Selecting respondents involved purposeful sampling with a variant that satisfies the requirements of a quota sampling approach. The above sample generally purported to act in the best interest of the member. The POs spoke on behalf of the funds they represent. This was a type of unique sampling, which falls within the broader family of purposive sampling, with the potential to differ from dominant views.

3.4 The research instrument

Respondents were asked to provide their details through a response form and encouraged to complete the interview process through an interview. A set of questions were sent prior to the interview with an explanation that these question were indicative and that, since this was a qualitative interview process, deviation was allowed. Open-ended questions were used for flexibility and ability to probe for explanations of specific behaviours under study. The interview schedule or guide consisted of semi-structured questions. There were specific advantages to be gained from semi-structured questions. These provided structure in terms of the topics being covered and also allowed flexibility in terms of questioning.

Another advantage of this semi-structured questioning format was that the sequencing could be changed and more questions could be added to accommodate issues that came up during the interview.

In terms of probing and prompting the respondent, the idea was to get the respondent to do most of the talking, in particular where there was a need to clear concepts and ideas and where ambiguity threatened to creep into the discussion. Discussions with respondents were referenced conventionally in this report with quotation marks.

3.5 Procedure for data collection

The face-to-face or telephonic interviews were expected to generate more data and even corroborate information garnered from literature and anecdotes. Secondary documents studied as part of Merriam's (1998:112) "wide range of written, visual and physical material" was proposed to be part of research tools, specifically for purposes of triangulation, available for this research.

The inclusion of secondary documents allowed the researcher access to documents such as organizational membership and financial records, third party and media reports as well as other analyses.

In the literature review above reference is made to private and public documents of report analysis and regulatory discussion documents respectively. The documents themselves fall broadly within quantitative and qualitative approaches. Some of the data sources, such as the names of respondents, are subject to confidentiality.

3.6 Data analysis and interpretation

The case study "unit of analysis" was a contributory pension system referred to by Miles and Huberman (1994:25). Open-ended questions were used in the face-to-face and telephonic interviews for flexibility and the ability to probe for explanation of specific behaviours. The final analysis was aided greatly because of this flexibility in the thematic analysis with responses grouped into themes.

The semi-structured questions utilised in the interview process flow into the topics covered. They also provide flexibility in terms of questioning. The different topics were in fact a reflection of Stake's (1995:2) "integrated system" and provided the basis for coding. Coding refers to the process of clustering similar responses in a category to create themes.

In terms of probing and prompting the respondent the inclination was to get the respondent to do most of the talking; in particular where there was a need to clear concepts and ideas and where ambiguity threatened to creep into the discussion. The discussion with respondents was referenced conventionally as noted above. Responses were summarized to reduce the amount of text.

The proposal to include secondary documents allowed the researcher access to documents otherwise not accessible, such as organizational membership and financial records, third party and media reports and other analyses. This method completes the case study in what Wolcott (1992:36) terms "an end-product of field-oriented study".

In the literature review above reference is made to private and public documents of report analysis and regulatory documents respectively. Some of the data sources, such as the names of respondents, were subject to confidentiality.

The documents themselves are within the broader classification of quantitative and qualitative approaches and relevant for use in both strategies.

3.7 Limitations of the study

The sample for this study was deliberately small and the method purposeful sampling. Purposeful sampling is non-probable and therefore a large portion of the unit of analysis did not have an opportunity to take part.

3.8 Validity and reliability

Validity and reliability have strong positivist roots which look for specific measures and standards to ascertain them. In qualitative studies results are not generalizable to populations or universes as noted by Yin (2013). This is an important distinction because interpretivist world-views allow for certain biases - not only because of the researcher herself/himself, but also the qualitative methods employed.

The case study method has different notions of reality. In its assumptions reliability and validity invariably differ from empirical science because, to quote Geertz (1994:217), “what we call data are really our own constructions”. To enhance credibility Geertz developed the idea of “thick descriptions”.

Qualitative methods emphasize congruence with reality as part of validity check. To this end Creswell and Miller (2000) advocate a method to search for convergence among multiple and different sources of information. In researching the pension replacement ratio the researcher will confirm the policy provisions which give rise to any answer (e.g. contribution rates) which claims to have its origins in policy (e.g. fund rules). This type of check should do away with claims of unreliability of the part of qualitative methods.

The use of triangulation of methods and sources to enhance internal validity should allay concerns about the qualitative method. Triangulation of methods is expected to lead through different methods to the same results. In this research the use of interview and document sources (annual reports, benefit statements) should serve the triangulation purpose.

The proposed interviews were expected to feature individuals from different perspectives of the contributory pensions system. The administrators (Old Mutual or Alexander Forbes) need to make money from the skills they expend on the administration and investment activities of contributory pension plans.

On the other hand, officials who represent members in the maze that is the contributory pension environment want to save costs as much as possible to enhance the pension replacement ratio. This natural tension in my sample will bring out the best of the triangulation strategy. In this way triangulation holds out the possibility of more fully explaining the complexity of human behaviour. Research findings can be taken back to members for consistency checks with what they reported in the interviews.

From a researcher point of view the external validity of this study lies in the amount of time spent in the interview and saturating the analysis. Respondents on the other hand are encouraged to reflect their reality as accurately as possible. The study will also be subjected to external reviews. In order to establish generalizability, in the qualitative sense, the results have to be consistent with the data. Reliability in qualitative research is measured by the depth of understanding a reality.

In this research the sampling method allows for a case-to-case transfer type of generalization where an experienced user makes a judgment about what is general between two cases. The description of the interview site provides some possibilities for generalizing according to Bryman (2013) and must be reported as part of the data that should be collected. This type of data could be used as part of the *ice-breaker* questions. In terms of sampling strategy a purposeful sampling was chosen to introduce the idea of multiple sites.

Part of enhancing dependability is to follow an auditable process in terms of data collection methods, categorization of the data (refer to the topics in the interview schedule) and how conclusions or decisions are made. The use of triangulation strategies also form part of the reliability checks. Researcher disclaimers in terms of inherent biases do enhance reliability. As a social security practitioner this researcher holds views regarding certain practices and behaviours such as conflicts of interest. This type of disclaimer is necessary and contributes to the process of reliability checks.

There are alternatives to reliability and validity checks as practiced in qualitative research methods.

Views of authenticity of methods and results as well as their impact on the wider social research have merit. The researcher has a responsibility to demonstrate trustworthiness in the practice of the craft.

Trustworthiness is shown by the extent to which research methods and findings are credible, transferable, dependable and confirmable from a research methodology point of view.

3.9 Demographic profile of respondents

Although different retirement schemes do collect minimum information for the schemes they administer, the majority of important information is not collected in the scheme directly, but assumed to be available at employer level. However, data such as marriage status for example is important to the scheme if members need to provide for a spousal annuity. Yet the information is not retained at scheme level and is assumed to be available at employer level. Different schemes are indeed primary consumers of information which is relevant to scheme business. In their capacity as custodians of scheme data and other functions fund managers are qualified to be interviewed.

As noted before Arenas de Mesa *et al* (2006) has lamented the information gaps in the pension system because of its impact on participation and other choices in the scheme. In an analysis of administrative records in the Chilean study, the research team concluded that the profile of a scheme is important because lack of knowledge is concentrated among those employees with poorer backgrounds, less education, and women.

Although most retirement scheme administrators have the information that the younger members of the schemes do not preserve their accumulated credits, these same schemes do not exhibit an understanding of the gender dimension and the nexus between gender and education levels in their schemes.

Variables such as age (particularly young members), gender dimensions as well as the nexus between gender and education levels are important because saving for a pension is age sensitive, in the same way that communicating pension messages is education sensitive.

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

The results of the interviews are presented in the **table 3** below in summary form. The results are based on a recording of the interview with the respondents as identified in the methodology section. The recordings are included on a CD as part of the report submission. The respondents (officials and scheme proxies) as well as the scheme/members are profiled in this report.

The results are presented starting with the date of the interview, the length of the interview, the respondents companies (see **table 2** for the respondent's profile), the answer coding, theme and the responses complete with conventional quotation marks. The themes columns are aligned with the interview schedule to allow for easy flow of results presentation and cross-reference.

A separate but similarly named table is added at the bottom of the main table to reflecting demographic details.

4.2 Results Presentation

The results of the interviews are presented in the table below in summary form. Results are reflected in detail in the section immediately below. The respondents were three entities namely: Alexander Forbes Retirement Fund (AFRF), Road Freight and Logistics Industry Provident Fund (RFLIPF) and the Old Mutual SuperFund (OMSF).

Table 1: Respondents' membership profiles

Scheme	Gender (M/F)	Age category	Education levels	Marital Status	Coverage (employers)	Average years in scheme
AFRF	56% male and 44% female	20-25 years 7% 26-54 years 90% 55-65 years 3%	n/a	n/a	620	5 years
OMSF			n/a	n/a	n/a	
RFLIPF	90% male and 10% female	Average age in the scheme is 45 years	n/a	n/a	3200	5.5 years

The demographic profile of the AFRF shows a 56% male and 44% female split across 620 retirement schemes under administration by Alexander Forbes. Roughly 7% of its members between ages 20-25 years are categorized as an arbitrary “young”. The average contribution period is between 4 (low) and 10 years (high).

It is reported that only 3% of current members qualify for early retirement and are classified as “old” starting at 55 years as per the rules of the AFRF. The rest of the membership (90%) falls within the 26-55 years category, or between these two categories. The AFRF does not collect or keep information about the education levels of members. This piece of information is crucial in the context of a discussion about disseminating scheme information, education material and the usage thereof as seen in the Chilean longitudinal study referred to above.

The demographic data in the RFLIPF shows the membership has an average age of 45 years with a 1:9 female to male ratio. The average contribution period is between 5 (low) and 10 years (high). The scheme has 3,200 pay-points represented as employer groups.

Age is a vital component of the design of the scheme’s investment strategy. The scheme reported that they “perform member age analysis” to input into the investment strategy, particularly the risk/reward trade-off. This is probably the equivalent to the “investment assumptions” process by AFRF. The younger members in the scheme are reported, or assumed, to have more risk appetite than older members who display conservative behaviour.

As a result younger members are exposed to high risk investment strategies such as equity stocks, while older members pursue a capital preservation strategy in which typically involve government bonds.

Like the AFRF, the RFLIPF does not collect or keep information about the education levels of members. This information is crucial in the context of a discussion about disseminating information, education material and the usage thereof. The RFLIPF does not keep data on the marital status of its members either. There is a nexus between marital status and a discussion about annuitization, specifically the spousal annuity, raised below. Annuitization is an important metric of IRR.

OMSF did not share any demographic details of the fund because "the information is with the employer".

Table 2: List of Respondents

Scheme	Official/s	Type of Scheme
Umbrella Fund 1 (OMSF)	Knowledge Manager and Product Manager	Registered Provident/Pension Fund – Commercial
Umbrella Fund 2 (AFRF)	Head of Research, Actuarial Consultant and Administration Manager	Registered Provident Fund – Commercial
Umbrella Fund 3 (RFLIPF)	Principal Officer (PO)	Registered Provident Fund – Industry based standalone

Whether a benefit paid to a member is adequate needs criteria, any relevant criteria, against which to measure its performance. AFRF presented a team of 3 interviewees from their retirement administration platform, including the: head of research, head of administration and the consulting actuary. The team was asked whether the AFRF has benefit adequacy criteria against which to measure the performance of the AFRF to which the team answered: "trustees do not have a benefit adequacy criteria". The team argued that an adequate benefit is dependent on the *assumptions* made in the area of salary levels, contribution rates, inflation, investment returns, and costs as well as that they prefer to focus on these assumptions. In any case it is these assumptions, and the performance thereof, that contribute to the benefits ultimately payable to members.

How the assumptions are measured is a function of a "Lifegauge Tool" they have developed in-house. A Lifegauge Tool is an information technology approach used "for consulting with clients" built-in with specific retirement scheme industry assumptions.

These AFRF assumptions ostensibly differ from assumptions made by other administrators for competitive reasons. Hence, the built-in assumptions remain proprietary.

The RFLIPF was represented by its PO, the public face of the fund. A lot of information generated in the fund such as the performance against important parameters is handled by a contracted service provider who in turn feeds data back to the fund. Consequently the information generated through the interview suggests that the flow is of information between the fund and its contracted service provider is satisfactory.

OMSF was represented by the knowledge manager and the product manager, although the product manager was not available for the entire interview. The knowledge manager was very helpful. However the lack of demographic data for this interview was a concern. The interview schedule, complete with a data section, was sent beforehand to all respondents in preparation for the interview.

Table 3: Summary of Results

Code	**Theme**	**Summary Response**
001	Benefit Adequacy measure/IRR	AFRF has no formal policy “Not applicable” and RFLIPF says “not at the moment” and OMSF has “RAG strategy”
002	Contribution rates decision	OMSF says “employer makes decision”, AFRF has “legacy issues” and “takeover situations” while the RFLIPF has “bargaining”
003	Investment return	OMSF has “CPI plus”, RFLIPF “CPI plus 5” and “indexation” and AFRF “asset assumptions”
004	Cost comparison	“Economies of scale” and “3.1% where industry is 4%”

005	Preservation	AFRF reports “no-one pays attention”, the RFLIPF needs “employer support” to get preservation going and OMSF has a “retention unit” to create awareness of it.
006	IRR awareness, targeting and shortfall	AFRF has “member benefit statement” and “communication forums”, OMSF has “member benefit statement” and “retention unit” intervention.
007	Annuitization	OMSF responds “not applicable”, while the RFLIPF says the topic is “beyond scope” or its sphere of influence and AFRF says “people don’t think about it until retirement”.
008	Standard of living	AFRF responded with “medical expense going out the roof” while both RFLIPF and OMSF reported “CPI increase” should be enough to cover the consumption and standard of living issues. In reality, the argued, the debate belongs outside the fund.
009	Consumption levels	See above code 008.
010	Is fund compulsory	AFRF responded “yes, it makes rating a lot easier”, while the RFLIPF responded “member must belong to a fund recognized in the industry, there 4 such funds” and OMSF responded “this is an employer decision in terms of eligibility criteria”
011	Fund demographic profile	See table below

The results are based on the recorded interviews with the respondents as identified in the methodology section. The respondents (officials and scheme proxies) as well as the scheme/members they represent are profiled below. The respondents are involved with the respective schemes on a regular basis and therefore appropriately positioned to profile their schemes.

The results are presented as categories of different themes and the respondents' responses are also reflected. The themes columns are aligned with the interview schedule to allow for easy flow of results presentation and coded for cross-reference.

The "Code" column in the table below allows results from different respondent to be quoted in one code. The "Theme" column is a summary of the questions asked (according to these themes) while a "Summary response" column presents summary results.

4.2.1 *Benefit adequacy/IRR*

All three entities responding to the research questions individually requested that the discussion of benefit adequacy and IRR be consolidated into one discussion. While it is common to think of adequacy in terms of IRR, it must be stated upfront that there are different ways to measure benefit adequacy. In the broader social security world some may look at old age pensions in terms of income replacement while others may look at the extent to which the income alleviates poverty. In this paper however the measure we looked at is IRR. Therefore the consolidation of the two topics not only reflected the understanding of the topic by the respondents but it also helped to sketch the conditions prevalent around this measure.

In terms of the results, two of the respondents (AFRF and RFLIPF) responded “not applicable” and “none at the moment” respectively to the benefit adequacy measure question.

The interviewer was given the assurance that this state of affairs merely reflects the current situation. The future will be different, as reflected in the statement that the RFLIPF “has initiated the discussion about IRR”. Indeed the RFLIPF is currently considering different options and expects that IRR will be set at between 60-70%.

In currency terms (South African Rands), the average salary in the industry is R6, 000 and the fund wants to target R4, 000.

AFRF does print a 75% IRR on the member benefit statement, a statement of the member's individual account, although they don't have a "direct answer" when asked if the fund has an IRR policy. How AFRF arrives at the rate printed on the statement is a function of a "Lifegauge Tool" they use for this purpose. It is an information technology tool used by AFRF to "populate assumptions" (assumptions of parameters composite of IRR) which emit a rate automatically onto the member benefit statement. This rate is however printed "without communication of what it is" to the member. In this way the member does encounter the rate. However there is no evidence that the member can interpret the rate.

OMSF on the other hand does have RAG Tool (RAG – red, amber, green) which they use to generate an IRR. The colour coding in the RAG is an innovative way to show progress made toward an IRR known only to the trustees since "the trustees have many years of experience to understand IRR". Interestingly the rate so generated is yet to be communicated to the members since "the SuperFund will start creating awareness by printing RAG on member benefit statements".

4.2.2 *Contribution rate decision*

The contribution rates in the AFRF are decided by the employer, with some a result of "legacy stuff" and others resulted from "takeover situations". The legacy stuff was explained as those contribution rates within a single employer group that were never reviewed. Contribution rates representing takeover situations, on the other hand, refer to situations in which an employer group inherits a group of retirement plan contributors either from a sale or purchase of another company. The average contribution rate in the AFRF is reported to be 12% of salary. The RFLIPF, for its part, reports a 20% contribution rate as a percentage of salary to be "10% a side".

These rates, in which both the employee and employer contributes 10%, hence 10% a side, are arrived at through bargaining that takes place between organized employer groups and trade unions representing the employees. These are referred to as "parties" to the negotiations.

It is reported that parties get their sense of adequate contribution rate from "salary rates and economic conditions" and they frequently use "advice by economists who look at data in the market".

OMSF reported that contribution rates differ per employer group participating in the fund. Average rates are reportedly R1,200 (one thousand two hundred rand) which combine both employer and employee contributions. In percentages the contribution rates are “6.5% of salary per employee and anything between 8-10% of salary for employer contributions”. The OMSF gets the contribution rates from the employer who decides based on their sense of “what is enough to retire on”.

4.2.3 *Investment returns*

The discussion of investment returns elicits an animated debate from OMSF because “we didn’t know you want to discuss our investment strategy”. Until the researcher clarified how investment returns fit into a discussion of IRR. OMSF targets a return of “CPI Plus” in each of the employer group’s investment portfolios. The concept of CPI Plus is industry jargon for investment returns above (plus) the inflation rate (CPI).

It is reported that this target, if achieved, would counter the effects of inflation over time. The targets are reportedly decided based on a life-staging investment strategy which suggests “less volatility when approaching retirement”. Conversely the volatility is higher for the younger members of the fund. Part of achieving the targets involves careful attention during the transition from one risk group (volatile) to another (approaching retirement) to “achieve rand cost averaging”. Cost averaging involves withdrawing from a volatile portfolio to less volatility regularly over time, presumably to sell portfolios when prices are high and buy when prices are low during the transition.

AFRF uses the Lifegauge Tool to set the investment return parameters which are constrained by regulation (regulation 28 of the Pension Funds Act sets different limits). It is reported that the asset assumptions within the regulation will be tested over time. In the intermittent period AFRF tracks the RIY which measures the impact of costs on investment returns. In recent times they calculated the rate to be 1.14% charge[1] of scheme assets. Indeed the AFRF has calculated that a reduction in the RIY can add half a percentage point to the investment performance.

Asked if they use the rates they calculate to negotiate and even change investment managers, they responded that “there’s very little you can achieve by changing investment managers”. This approach is markedly different from that of OMSF and, as reported below, that of the RFLIPF.

[1] ‘the effect charges and fees have on investment over a period expressed as a percentage’

The RFLIPF, for its part, has an investment return target of "CPI plus 5 on a rolling three year period". This suggests that in any consecutive three year period (the fund was established in 1991), regardless of volatility in the market, the returns profile have to be of the order of CPI+5. The target in the RFLIPF is reportedly based on the age analysis (life-staging) of the fund members and a choice of investment managers to manage assets in alignment with the fund investment strategy. An "indexation" strategy which involves a passive management of assets was also discussed in the RFLIPF for its cost-effectiveness.

4.2.4 *Costs comparison*

AFRF has shown above that costs do affect the investment outcome as measured through a RIY of 1.14% shown in the foregoing discussion. OMSF raised the discussion of RIY under this topic in which they report "encouraging potential clients to compare their offering to that of competitors based on RIY".

AFRF states that the costs of running the fund are based on the size of the fund. In other words they report that "the bigger the fund the lower the fees" for administration and other costs. OMSF has a similar philosophy that "it is economies of scale that matter" when fees are compared.

The RFLIPF reports going to the market to compare administration and other costs of running the fund. The stated figures "are borne out by a study by Sanlam showing average 4% of salary paid for risk benefits and administration but the RFLIPF contributes 3.1% of salary". In terms of investment fees the report from RFLIPF states that the investment target takes into consideration the costs (returns are calculated net of investment fees). Indexation investment strategies also contribute to cost-consciousness.

All respondents were asked what their response is to the widely referenced Rusconi (2004) report on the costs of savings for retirement[2] in South Africa which found a TER (see glossary of terms) of 28%. They all reported that they have not done a comparison of this kind to see how they compare to the findings in the Rusconi report. Indeed the RIY reported by, at least the AFRF and OMSF, the respondents are for services offered by them rather that the total expenses applicable in a fund charged on the basis of total services consumed by the fund.

[2] 'Rusconi delivered a paper at a conference titled Costs of Saving for Retirement: Options for South Africa'

4.2.5 *Preservation*

All the respondents know that legislation allows for preservation[3] and even encourages it (through a tax neutral movement to preservation fund in terms of Income Tax Act). The behaviours around preservation are starkly different. Responses range from "no-one pays attention to preservation" (AFRF) and "employer support is needed" (RFILPF) to issues of costs reportedly in the road freight industry to the effect that "members have asked why they should preserve and still pay fees on the preserved assets". OMSF has a more active policy in the form of a "retention unit set up to convince people to preserve". The unit staffed by people who receive information about withdrawals and then use the information to surmise an opportunity to educate members about the virtues of preservation.

The preservation policy intervention is that a withdrawing member is telephoned to be "convinced" to preserve their accumulated pension credits. The intervention has worked to a limited extent with the result that "younger guys tend to ignore the RAG, middle age (35 upwards) respond sometimes". Only older members 50 years and older who are deemed to be nearing the retirement age have responded positively to the preservation issue. The intervention is supported by the RAG strategy. OMSF's objective is to intensify the preservation campaign by showing RAG on member benefit statements in future. The respondents have failed to bring preservation about, and they all agree that for preservation policy to function at optimal levels regulatory reform to enforce it should be considered. Indeed regulatory reforms are necessary because of the failure to respond to the challenges associated with preservation policy. In the case of AFRF the respondent suggested preservation is a labour market issues and the "personnel department must connect the dots" in terms of the implementation.

4.2.6 *IRR awareness, targeting and shortfalls*

IRR awareness is created through printing the rate on member benefit statement and member communication sessions in the case of AFRF. OMSF create awareness through a combination of member benefits statement communications and retention unit strategies.

[3]preservation is 'a requirement that money saved through a pension of provident fund remain in the system when members change jobs without incurring tax or penalties'

The purpose of the interventions is to highlight the risk that the income objectives may not be reached. In the case of OMSF the RAG will be used to communicate not just the risk but the intensity of that risk through the red (danger) and amber (caution) colours.

4.2.7 *Annuitization*

A discussion of annuitization is about the costs thereof. AFRF reports that “people don’t think about annuities until retirement” and that “annuities are costly”. The statements show that AFRF do not consider costs of life annuities.

The RFLIPF has not considered the cost of annuities as the fund considers this aspect “beyond scope” or beyond its influence.

OMSF also dismiss the discussion of the costs of annuities as peripheral “since annuities are in the name of the member”.

4.2.8 *Compulsory Fund*

All the respondents report that the Fund for which they are responsible is compulsory to the member. AFRF states that “this makes risk rating a lot easier”. The RFLIPF’s eligibility is more flexible as it reports that the “fund is compulsory unless a member belongs to other funds that are recognized in the bargaining agreement”. OMSF on the other hand reports a compulsory scheme with “eligibility criteria decided at employer level”. This is written in the special rules applicable to each employer group in the fund. The scheme receives membership and contribution schedules and assumes that the employer has applied compulsion to those members to whom membership must be enforced.

4.2.9 *Standard of living and consumption levels*

Respondents were asked if they consider any issues that may affect consumption levels of the members after retirement beyond IRR measure. Although AFRF knows that “medical expenses are going out of the roof” suggesting high medical inflation rate, the fund does not respond to this. The RFLIPF considers the consumption issues “are external to the fund but considered in terms of CPI (inflation rate)”. Like the RFLIPF, OMSF reports that members get the “CPI (inflation rate) increase” to their contributions to take care of post-retirement consumption and standard of living issues.

4.3 Summary of the results

Although most of the questions were indeed answered, it is interesting how different and varied the responses were across the board. Particularly interesting is the notion that important data about scheme members does not reside in the scheme itself but with the employer. This explains some of the missing data. Employers are expected in all instances to propose interventions in the area of preservation. Also interesting is that what passes for important data in the literature is less so in practice. Data about the gender and education dimensions appear unimportant, yet a lot of the interventions could hinge on it.

While the SuperFund did participate fully in the research, the officials did not have any demographic information on hand. This suggests that important details such as scheme parameters, policies or interventions may not be evidence-based.

The results do show that, on the whole, the interventions necessary to bring about the changes in retirement outcome will most likely come from regulatory reforms. However the data and evidence to support policy interventions resides in the industry.

CHAPTER 5. DISCUSSION OF THE RESULTS

5.1 Introduction

Data from the interviews is analysed in this chapter. Key topics are clustered into themes to form a general picture of the condition of IRR in the respective retirement plans and links to the interview questions and to the literature. The objective is to categorise the responses from different respondents in alignment with the questions asked.

5.2 Analysis of respondent schemes

The research question and other sub-questions were put to AFRF, a commercial administration scheme registered in terms of S13B of the PFA. It is run by a set of independent trustees who provide its governance and exercise oversight over the entity. In terms of its set-up the AFRF is registered as a DC provident fund, compulsory at the workplace, with the normal retirement age (NRA) parameter set at 65 years while the average contribution rate is 12% of pensionable salary.

While the set-up of the fund is legally compliant, there is a blurring of lines between the fund and the company that administrators it. Both have the name Alexander Forbes. This is also the case with Old Mutual. The problem with commercial schemes such as these is of conflicts of interest. It is difficult for the fund to insist on adequate benefits for members when its parent company is not making profits. This and other issues, together with the literature, have shown that marketing and commissions can easily erode fund resources.

The NRA is important because it is the year at which the objective of the scheme to provide retirement benefits and rights, after collecting contributions for a period for the benefit of the members. The age parameter is decided in the scheme rules and has to be risk-managed as part of IRR assumptions.

As an illustration, an NRA set at 65 may not be lowered without affecting the contribution rate. The contribution rate on the other had should be set with an NRA in mind to provide a sense of the retirement benefit, less the tax burden. These are just some of the many different parameters to measure the performance of a retirement scheme that has or should contribute to the income objective.

Other parameters, discussed below, are benefit preservation, costs, investment returns and annuities – all of which contribute to adequacy of benefits.

The AFRF does not keep data on the marital status of its members. However there is a nexus between marital status and life annuities[4], specifically spousal annuity, raised below. Converting a pension into an annuity is an important component measure of IRR. The extent to which a member is able to purchase a spousal annuity is dependent on the cost of such annuity. In this regard a private pension fund has to pay attention to such cost when projecting the adequacy of benefits. In this qualitative study it was important to collect the demographic and parametric data not only to profile the AFRF but also to examine the adequacy of the benefit paid to members.

The RFLIPF, on the other hand, is not registered as a commercial entity but as an industry retirement vehicle for its members. The scheme was started in 1991 as a product of sector-wide negotiations between organized labour and organized employer groups.

Its Board of Trustees is, in this case, elected indirectly by members it terms of its registered rules (gleaned as part of triangulation). The members elect trade union representatives who in turn elect representatives to represent them on the board of trustees. This is a governance issue in that private pension schemes should be accountable to their members. In this case, the RFLIPF, suggest the representatives on the board of trustees account to the trade unions. In other industries where the employer has a role on the board, the RFLIPF has “negotiated” the employer out. The scheme is set up as a provident fund, compulsory in terms of a collective agreement reached between the parties in the sector.

In the context of a discussion of IRR, these layers of representatives, parties and trade unions perhaps serve as distortions of the IRR which is not too visible to the member. The NRA in the RFLIPF is 65 years, and the contribution rate of 20% of salary made up of 10% by both employer and employee.

The OMSF is a commercial administration company registered in terms of S13B of the PFA. It is run by a set of independent trustees who provide its governance and exercise oversight over the administration entity. The trustees are independent from the employer and employee who contribute to it although they are eligible for election.

[4]a life annuity ‘is an insurance product in which the annuitant receives a series of future payments for his/her lifetime after retirement’.

Since the fund is not based at the workplace the distance between itself and its members is a disincentive for the contributors to be interested in serving as trustees. In terms of its set-up the OMSF is registered as a DC provident fund, compulsory at the workplace, with the normal retirement age (NRA) parameter set at 65 years while the average contribution rate is 18% of salary.

It is very difficult to understand how the schemes would survive had it not been for compulsion. Collective agreements, in the case of RFLIPF, by their nature are a group phenomenon rather than individually based. A collective agreement may meet the requirements of a group, but fail to meet the needs of individuals. The employment contract with the employer presents a different challenge. While members join a scheme as a condition of employment, it has become necessary to compel them to do so to bring about the scheme's survival as there's very little the scheme offers with its current form. Without a visible IRR, or adequate benefits, anyone can invest for retirement on their own.

5.3 Benefits adequacy measure/IRR

Alexander Forbes reports that a random IRR, arrived at rather arbitrarily, is printed on benefits issued to members. These, and the member forums, represent practical steps in terms of which an IRR discussion is raised with members. Other interventions involve sharing the education with an employer who "is not interested".

Whereas the employer shows disinterest, the AFRF team hopes Human Resources personnel at the companies will "connect the dots" and start disseminating the information.

It is the "disinterested employer" who is expected to mobilize member communication forums at the workplace for the fund and its members to communicate. Innovative ways have to be found to overcome these problems. Perhaps it is the alienating distance between the employer and the fund that is causing the disenchantment. The distance possibly explains the member's own proximity to the discussion of IRR.

While Alexander Forbes is reported to have the tools and fortitude to show members what the IRR is, as well as the practical steps members need to take to achieve the required level of IRR, fund managers are not sufficiently incentivised to do so. Compounding this is the scheme members' wishes for "more money in the pocket".

The wish for more money in the pocket refers to a situation in which members deliberately keep the contribution rate down because they have very little information from the fund manager to understand the consequences.

This is also an insight into the labour market that links salary levels with income objective or IRR. While Alexander Forbes estimates “only the government can change the rate situation”, it is clear that communicating such information might cost the fund manager the contract and so it’s in the fund manager’s best interest to keep relevant information away.

The same research question was asked of the RFLIPF: “Does the visibility of income replacement ratio measure affect member’s pension choices?” In the RFLIPF, a party to the negotiation presents a pre-selected retirement arrangement chosen on the basis of a method they use. Talking to a scheme official, the PO, who is not a party to the negotiation; it is not clear what method is followed in the pre-selection process. The PO accepts that a provident fund arrangement, which predates his arrival at the scheme by a few decades, is the member’s choice. Having a provident fund foisted upon an official appears not to be the issue, rather, it is how decisions are affected by the lack of transparency.

Asked about the existence of a *benefits adequacy measure* in the scheme, the official answered “none at the moment, but we have initiated the discussion”. The discussion about benefit adequacy is important for the reasons mentioned above namely its visibility and as a measure of compliance and performance.

The scheme does not have a stated IRR. While it is reported that there is a discussion underway to set an income objective in the form of an IRR, the PO reported that the average salary in the sector is R6,000. The income objective discussion has proposed an IRR of R4,000 or 67% of salary. However, since the income objective is merely a discussion taking place in the scheme, it is not surprising that different parameters which contribute to the achievement of the income objective remain informal. The discussion relating to benefit preservation should be understood as an initiative on the part of the scheme rather than as an act of compliance.

OMSF has the RAG (red, amber and green) strategy as a proxy for IRR. It is a new initiative and therefore has generated no data for review and to contribute to any enquiry. However, its objective is to demonstrate progress made towards achieving an income objective for individual members.

Member benefit statements are the primary site on which the RAG strategy is communicated to members, amplified by its interactive colour coding system reflecting the functionality associated with traffic lights. When a red colour is communicated to members its message is that of “stop” to think about the dangers of inadequate benefits. The amber “cautions” members against the potential to miss the income target, while the green suggests “great progress” against targets. It is understood that members have been made to choose a target through the intervention by the “retentions unit” when they were asked to nominate an amount as a percentage of their salary which the members would like to earn at retirement.

It is an initiative mobilized within the scope and efficient deployment of resources by the administrators of the scheme. There have been instances of members heeding the call to preserve accumulated rights and benefits shown through a decision to increase contributions by some members. Although the RAG initiative has attracted members under its 3 different categories, the data in this regard is still very limited and tentative at this stage. While RAG is essentially a target tracking mechanism, it is encouraging that it is used as a member education initiative to relay important information to the scheme members for decision making. The literature is awash with anecdotes of irrational decision making.

5.4 Contribution rates decision

In terms of the contribution rate parameter the answers are more revealing. Alexander Forbes reported an average contribution rate of 12% of salary in the AFRF. This rate is very much part of company policy, inasmuch as the contribution rate is in line with the 10-13% contribution rate advocated by the World Bank. When asked if this was deliberate, Alexander Forbes felt that “World Bank rates are problematic because people anchor their policies on it” without using objective tools, equipped with mid-term reviews, to arrive at rates. When asked about the current practices in terms of which contribution rates are arrived at; Alexander Forbes reported that rates are arrived at on the basis of “takeover situations” while some of the rates are “legacy stuff” even as Alexander Forbes has a Lifegauge Tool when consulting with client companies. A *takeover situation* refers to situation when a company is bought by another and the contribution rates applicable to the scheme are retained as company policy, partly because the law (Labour Relations Act S197 regulates benefits during a takeover) requires it.

It can also be an affordability issue if the company chooses to retain the rates when an opportunity to review the rates arises. On the other hand "legacy stuff" refers to rates set since the 1980s with the advent of DC pension systems without so much as a review. It is not clear why the World Bank set rates are problematic for AFRF while contributions decided through the "legacy stuff" and takeover situations are acceptable.

The Lifegauge Tool is useful when analysing different elements of IRR so that when one parameter is changed the impact on the rest of the parameters is shown. In other words, if a contribution rate is changed, for example from 12% to 15% of salary, or the normal retirement age is changed from 65 to 70 years, the positive/negative impact of this change is laid bare on the members' account for the rest of his/her years in the scheme. The impact is revealed on each of the parameters that make up the rest of the member's account.

Even a scheme-wide impact is revealed in this way. This is useful because members can have sight of different benefit permutations and make educated choices. While the different benefit scenarios, including shortfalls, are information generated for the employer and employees in the labour market, there's no evidence the information is taken into consideration during salary deliberations. However the Lifegauge system does sound like an objective way of making decisions. In the end the perceived objectivity *is distorted when the respondent is not willing to reveal the fee structures assumed in the Lifegauge Tool*.

The RFLIPF on the other hand makes contribution rates decisions at the negotiating table as a function of negotiations between employer representatives and employees' trade unions representing their members. Although there are many factors which affect the negotiations process and the contribution rates decision towards the retirement plans, it is reported that during deliberations it is salary levels and the economic conditions that play an important role.

Percentage salary i.e. the 10% contribution a side (employer/employee), is a function of the total salary after salary increase rates at the negotiations, represent the labour-market factors which are at play during the rates decision. Benefit adequacy by any measure, whether IRR or not, is a factor in the RFLIPF only to the extent that inflation rate is. Although the trustees are represented in the negotiations (not as trustees but as negotiating parties) their input from a retirement planning point of view is generic, possibly in the spirit of general CPI discussion.

This is not too different from the OMSF decision process. Contribution rates in the OMSF are decided in the labour market by the employer as part of remuneration, with no clear input from the scheme. The fact that it is the employer who decides what “enough to retire on” is has to be a weakness in the system and a case for reform.

Without casting aspersions on the employer's *bona fides*, the employer has different motivations to that of the member, namely the management of their business and making a profit. On the other hand the member and scheme seek adequate benefits, while government policy ultimately has to achieve policy objectives that have the member at its heart.

5.5 Investment returns

A picture is painted of employees interested only in instant gratification without regard to investments when they are young. The concept of more money in the pocket suggests less available money for investment to generate investment returns which are vital to the fulfilment of an adequate IRR. AFRF uses the Lifegauge Tool to help clients set parameters and asset strategies in the area of investments and in pursuit of IRR objectives within the constraints of regulation (regulation 28 in the Pension Funds Act). Investment returns are vital to measure the performance of investment managers. The Lifegauge Tool is loaded with investment assumptions that are presented to the scheme.

In terms of the assumptions it is reported that younger members in the scheme are assumed to have more risk appetite than older members, who display conservative behaviour. As a result, younger members are exposed to high risk investment strategies like equity stocks while older members pursue a capital preservation strategy such as investing in government bonds. This is a normal distribution of risk and attitudes. Asked if investment managers are changed if they do not perform in line with the objectives of the investment, the respondent felt that “there’s very little to achieve by changing asset managers”. The respondent feels that over the long term investment managers are all the same. While it may be true that “in a 40-year period it doesn’t matter who the investment manager is” the respondent seems to have placed very little weight to the issue of changing asset managers based on high costs. The respondent’s own evidence supports this, when it is reported that costs do result in a reduction in yield of 1.14%.

A high return on investment or net profit, generally expressed through a formula (net profit = gross profit – expenses), must compare favourably to the cost of investment.

While there are many fees payable in the investment value chain, the respondent acknowledged that costs do affect the investment outcome. The respondent was able to generate evidence through the Lifegauge Tool to show that "an extra 50% basis points (half a percentage point) of performance can be added to the investment" with prudent investment management. This is great information for IRR purposes and should be shared with members through member communication.

From the respondents' reluctance to change investment managers on account of high costs may flow from fact that the respondent is using the investment arm in their organization. This is a classic case of a conflict of interest.

The RFLIPF does an "age analysis" of the scheme to get an aggregate risk appetite of the scheme from which the scheme proceeds to set an investment return target (also known as internal rate of return) equivalent to CPI plus 5%. Practically the scheme will categorize its members into three groups: young, middle aged and old. These categories would have different investment strategies, namely, high-, medium- and low-risk investment portfolios, respectively, which have different returns profiles. However, the aggregate returns target for the whole scheme, set as CPI plus 5%, suggests that the scheme would be in line to meet a net 4% return advocated in the literature by Andrew (2004). As reported by RFLIPF, the target is arrived at through a mixture of asset strategies and combinations of different investment managers, with different investment histories and styles to manage the process of generating the required investment returns. The investment choices are "assumed", in the context of uncertain economic conditions, to be of such quality that the target should be met. As noted in the interview a high cost structure in the administration of the scheme has an impact on the internal rate of return for the scheme.

The OMSF does have, as it should, an investment strategy. While the basis of "CPI plus" is used as a target in terms of investment returns, the administrator still does not explicitly state a net return of 4.25% over extended periods, as stated in Andrew's (2004) discussion of investment performance as it relates to IRR. The *net* refers to returns after fees and inflation has been adjusted for. Furthermore the literature argues in Andrew (2004) that this is a standard way of presenting the targets to an investment manager.

The asset managers, in turn, are affected by the economic forces in the way they generate investment returns. In this way the investment trading activity of scheme assets, capable of generating inflation-beating returns, cannot guarantee returns and incur an investment risk at all times. Investment fees, on the other hand, do contribute in the context of TER incurred by a scheme, to a RIY.

From a policy interest perspective this is yet another case for the better use of information to restructure scheme investments. Public policy is capable of guarantees at a certain level of returns to augment market returns in periods of lacklustre economic growth.

5.6 Cost comparison

All the respondents indicated that their provident and pensions offerings are structured according to standards prevalent in the industry; which includes retirement provision and insured contingencies such as death, disability and sometimes funeral cover. This structuring is generally provided in the rules of the retirement scheme as member rights, and registered with the authorities - in this case the Financial Services Board. Once the rules are registered the general provisions and benefits thereof become enforceable.

It is important to understand this kind of structuring to understand some of the costs applicable in the respondent schemes. When a retirement scheme is structured in this way the costs of providing the administration and cover for the specified contingencies are then rated usually between 3% and 7% of salary. The AFRF was however unable to provide specific costs as the rating depends on the profile of a specific scheme. This is based on the rationale that a scheme with an older membership profile costs more to administer than one with a younger membership profile. This is so because older people's propensity to claim risk benefits is more than average.

However, a retirement scheme usually provides services that are much more than administration (in the sense of member administration, and risk cover). Services such as annual financial audits, asset management, investment consulting, tracing service, actuarial services, legal and many other services as listed in the National Treasury (2013) paper detailing *Charges in South African Retirement Funds*. Rusconi (2004:7) puts the TER figure at 28% applicable to all these services and the charges thereof.

The respondent was asked about the competitiveness of the fees within their scheme. They reported that they do measure competitiveness but also they know that ultimately it is about “the bigger the scheme the lower the fees”.

In other words it is economies of scale that influence this aspect. This is tacit admission that the costs are not competitive because fees are not transparent and therefore not subject to competition.

There is no evidence that administrative efficiencies require very large membership numbers either. It is significant that the AFRF is a compulsory scheme in terms of employer policy. Without compulsion it is not clear if the members would choose the provident fund basis of funding or any retirement arrangement in the context of depressed labour market salaries.

Internal rate of return is a function of not only a choice of investment strategies and managers who are able to achieve the target, but it is also affected by how much money is lost to the fees payable in the entire scheme value chain. The costs of managing the scheme are therefore worth checking from time to time. The RFLIPF reported that costs are “competitive borne out by a study by Sanlam showing average 4% paid for risk and administration but the RFLIPF contributes 3.1%”. On this basis it is commendable that a fee comparing exercise is conducted from time to time, albeit based on a report which is hardly neutral. Although the RFLIPF reported that fees payable in the investment value chain such as, investment consulting, asset management and custody fees “are taken out of the investment returns so that the costs from a member’s point of view remain the 3.1% cost levied from the contribution rate”. On face value this argument is sound except that markets do not always experience positive returns. The RFILPF reported that in the absence of economic growth, in which investment returns are negative, members “pay for the fees from the contributions”.

Bikker and De Dreu (2007) discussed the contradiction between IRR and total administration fees. The contradiction is demonstrated when an increase in annual operating costs of 1% of pension fund assets implies a cumulative reduction of 27% of eventual pension benefits.

And so, the issue of the cost of administration is indeed worrying and it is up to government reformers to bring about such change, as the industry is showing no initiative in this regard.

The RFLIPF reported that this matter was a subject of an unpublished study by Sanlam, one of its service providers and therefore an interested party, who looked at the costs of running the scheme. Although the scheme has two different administration service providers “for strategic reasons” as reported, the costs for the administration function are high.

The fact that the fund has two providers for a service that could be offered by one of them, talks to the lack of standardization in the industry. This behaviour suggests the scheme accepts fees that could be at odds with the requirements of an adequate IRR.

While the scheme understands that an active management strategy by the asset manager costs more compared to a passive asset strategy, in which a manager merely tracks an index without day-to-day monitoring of the portfolio, but with comparable investment returns. Indeed passive strategies' outperformance of active managers is linked to the idea of excessive risk taken by active managers to outperform the benchmark.

OMSF is a retirement scheme where the retirement scheme administration company and the scheme itself share a brand (like AFRF), which blurs the lines of accountability with implications for sound governance. Indeed the *brand* offers other services, such as consulting and investments management. In a situation such as this, the trustee’s independence is seriously fettered, in particular when investments portfolios are tilted in favour of the "brand" as advised by "brand" investment consultant. It is therefore no surprise that under these conditions the scheme would not take seriously the need to compare prices between those offered by the "brand" and those offered in the market place. Pricing strategies based on *economies of scale* are the order of the day. The subtle link between economies-of-scale fee mechanism - charged as a percentage of salary/assets - and economic growth suggest the scheme service providers benefit more when scheme contribution rates increases. However in a situation of negative economic growth, as seen with the RFLIPF report, fees are not decreased. It is also worth noting that when the economy creates employment, but scheme membership is voluntary, the benefits of scale may take too long to materialize. However, when scheme membership is compulsory members should realize the benefits of scale faster.

The eligibility criteria reported to be an employer’s decision considers only what is important for that employer and not issues such as economies of scale considerations that may be important in the scheme.

5.7 Preservation Policy

Benefit preservation in the words of Spratling *et al* (1957) concerns members of pension schemes who change their employment.

When changing jobs it is in the interest of members of retirement schemes to keep the accumulated benefit within a scheme for preservation purposes, as against making the choice to cash-in or liquidate their benefit. Unfortunately, it seems, most people choose the latter. The preserved rights are a vital ingredient to achieve an adequate IRR. There is a silver lining on the horizon as the older members get more conscious of the need to preserve. The AFRF team reported that younger members' knowledge of preservation has long been identified as a pre-retirement leakage in the system because this age category is "unable to think of preservation from an IRR perspective".

Preservation is a parameter which has to be optimised and one which forms part of the AFRF (LifeGauge Tool) "assumptions" in compiling an IRR. This parameter would not contribute to the attainment of the income objective in the category of young members reported to be "unable to think of preservation from an IRR perspective". When AFRF were asked how they show performance of the young members' scheme when the preservation parameter has performed dismally, AFRF stated that they do show members' current IRR forecast on the printed member benefit statements, suggesting a new contribution rate for the member where there is a need for it. They report that they raise the effect of the preservation parameter in "member forums" as an education intervention. In terms of preservation policy AFRF reported that there was no enforceable preservation policy beyond the rule that allows transfers into the Fund.

Asked if the AFRF knows that preservation is actually legal and available to members of the Fund, the respondent answered that they do know about preservation and noted that they have nothing in place other than member education sessions to disseminate information about it. To be fair tracking preservation when it is still voluntary would be difficult for any scheme. Seemingly the response that "companies do not care about preservation" resulted in the scheme's current posture. Asked if the respondent has any proposal to mitigate the companies' reported indifference, the respondent reported that "no-one pays attention, more-so the members", and proposed that the company which will be the new employer can require that a benefit is preserved before signing on the employee. This is a policy proposal which the respondent says should be formalized and marketed by the state. Although there is no clear enforceable way to bring about preservation education - communication seems the only way.

New employer contracts could be strengthened to force preservation as a means to achieve adequate IRR.

In terms of education the respondent proposed a strategy that “there is a need to show people concepts they can internalize” and what “R1million can buy in terms of annuity”. Preservation is another area that IRR targets in that it takes resources, otherwise earmarked for retirement, out of the system for immediate consumption. It is reported that the RFLIPF “retains withdrawal benefits for six month on member’s resignation”. This policy was intentional “to provide for members who change company but not industry, and to stop a member using the fund as a kind of savings account. But it was also intended to preserve the benefits only when members return to the industry”. The unintended consequence of preventing those who genuinely resign from the industry from accessing their benefits was provided for through a provision for special application to receive benefits at least 6 weeks from resignation. This would allow the scheme to ascertain, from the next payroll, that the member has indeed left the industry. This policy in the RFLIPF has the characteristics of forced, albeit mildly, preservation, and the flexibility that allows it to be legal. Incidentally the rule which provides for the policy was registered by the authorities (FSB).

However, it is important to note that even with this policy in place, in the RFLIPF non-preservation of benefits is legal in South Africa. Those who withdraw their benefits loose the tax incentive put in place specifically to encourage these members to preserve.

Asked if the RFLIPF knows about preservation, to make explicit its intention to bring it about, the response was “preservation for me would be to preserve money until retirement. So the six months rule is not preservation. Preservation is a good idea and it should be built into the fund administration process”. Indeed the RFLIPF confirms that no formal policy or intervention exists, as their role is to “advice members” to preserve. So education and training seems to be the preferred direction for the future. Hopefully, education will solve the reported conundrum that “members have raised the issue of costs and asked why they must pay to preserve if preservation is good for them?” It seems the costs associated with the administration of a preservation fund make it an unattractive proposition. The RFLIPF notes that “member education and buy-in is needed more than legislation” to stem the tide of resignations timed to cash-in benefits. From this point of view legislation alone would not work. It is the support of the employer and members which is desperately needed.

Asked if the scheme understands the link between preservation and the IRR target, the scheme official answered with the response expanded on hereunder.

OMSF as the respondent has mobilized a “retention unit” as an intervention in the area of benefit preservation as a kind of policy in action. The unit intervenes to provide “education and information” about the virtues of preservation as scheme policy.

While a retention unit is a great idea to educate members, it also serves to retain business for the administrator. It is a difficult role. Members would be well within reason to be suspicious of the intentions of such an intervention. However, it is reasonable to assume that there is nothing suspicious about cautioning a member that it is unwise to use their retirement assets to purchase luxuries such as a new television.

While administrators are reported to have a difficult time educating members about preservation, it is refreshing that members in their mid-30s are responding to the awareness drive. Members with the education and information, whether they responded positively to the call for preservation or not, would be better off when public policy moves in the direction of forced preservation.

Preservation is better driven by members who are educated about the need thereof. It is for this reason that administrators put up telephone services for those members who are interested. Interest, perhaps coupled with a state sponsored tax incentive scheme, has not worked better than anticipated forced preservation brought about by legislation. Although a mobilization campaign to educate key stakeholders seems a solution to address (or start the process of addressing) the needs of this industry, policy reform seems like the right antidote to bring an end to the vexing issue of non-preservation. IRR will be served well by preservation.

5.8 Annuitization

The education and information dissemination effort to get both the employer and employees to cast their views on retirement into the longer-term horizon extends to annuitization. This is a process of converting lump sum pension rights into a series of monthly incomes (annuity payments). Indeed the respondent’s experience is that “people don’t think about life annuities, single or joint, until retirement”. Retirement is a long-term game and as such certain mistakes in the life of contributors are not only costly over the long-term but they are irrecoverable.

That pension contributors do not think about annuitization until retirement is a deeply flawed behaviour trait, particularly when they have been given the education and other tools to do so. The costs of annuities have been on the increase over time as reported by the AFRF. This suggests contribution rates may have to be increased to keep up with the costs of life annuities. And so it is not only prudent to manage the retirement savings with annuitization in mind it is also important to think about single or survivor annuities.

Linked to the question of annuities is a discussion of consumption levels at retirement, particularly in the context of price inflation, because “medical expenses are going out of the roof” as reported by the respondent. The respondent reported that “annuities are costly” from the experience they gathered over time. The costs are even more concerning when there is a spouse to think about when making a purchase decision.

The OMSF consider annuitization to be a factor “beyond scope”. They do not track the costs of annuitization, and its potential impact on the current members, beyond the purchase of a compulsory annuity (in terms of regulation) on behalf of the member. The RFLIPF argues that the costs associated with annuitization are beyond the realm of the scheme. The scheme does not track the trends of these costs and has therefore never made contribution adjustments to keep up with these costs.

It is something of a travesty, as reported in the results section, that the crisis-bound private pension system is compulsory across a large number of employees and employer groups. In general compulsion is welcome, but the governance responsibility that accompanies it is absent from the system. So a mixture of compulsion and voluntary arrangements is possibly the most optimal combination.

5.3 Conclusion

As can be elicited from the interview responses there is a nonchalant approach to the importance of IRR targets for members of retirement funds. The responses suggest that the schemes have little interest or incentive to change both their own and member behaviour. The schemes have deferred the responsibility to get the key topics of administration costs and other key drivers of the crises to external parties other than themselves. The escalating costs associated with the value chain including administration, investment management, annuities and other administrative input are seemingly beyond the respondents’ collective capacity to rein in – despite the payment of substantial fees.

While there's evidence of IRR prevalence, or even discussions around it as recorded in report Code 001, there's very little to suggest the discussion was placed cogently on the table for discussion in the scheme.

The RAG strategy reported by the SuperFund, Lifegauge Tool used by AFRF and the eminent discussion taking place in the RFLIPF all under Code 001 of the interview summary report, shows the importance of this measure - although no finality on IRR was reached. While policy is slow to adjust, the response to this important topic is threatening to undermine the private pension system.

Code 002 of the summary report discusses the contribution rates decisions and shows a rather concerning trend. Concepts such as "legacy stuff" and "takeover situations" could result in market distortions.

Other descriptors such as "enough to retire on" and "advice by economists" and other consultants contribute to rates decisions with consequences for pension outcomes.

In Code 003 of the summary report on investment returns, the SuperFund and RFLIPF provide "inflation plus" targets to their investment managers, while AFRF asserts that "asset assumptions are tested over time".

None of the schemes were prepared to make an explicit statement that they want a 4% net investment return as advised by the World Bank. A target of "inflation plus" was explained as a return equal to the rate of inflation plus any additional returns above this level. It is important to note that inflation plus does not imply the 4% net investment target return is met. As important as this metric is, it is remarkable that there is a view that shrugs off sluggish investment performance with the assertion that "changing investment managers achieve very little".

Code 004 reports that cost comparisons receives cursory attention by schemes, which supports the "economies of scale" pricing method, despite evidence showing the benefits of scale is lost when there are too many operators in the market. The so-called benefits of scale get re-allocated to other areas of the value chain such as marketing and consultant commissions, as noted in the literature review. The schemes however continue to support this type of pricing even when the "reduction in yield" measure increases. This measure demonstrates the opportunity costs associated with the impact administration costs have on investment returns. Remarkably none of the schemes seems to know that the TER of their scheme approaches 28% as quantified by Rusconi (2004) and reported elsewhere in this report.

Code 005 and 006 shows that although preservation is ‘in the national interest’ as noted in classical literature by Spratling *et al* (1957), the schemes do not have a pragmatic response to this imperative. Responses in this regard are “no-one pays attention”, “no formal policy” and the mobilization of “an intervention unit” to pursue preservation. The impact of the intervention unit is yet to be measured by the SuperFund. The report around annuitization under Code 007 shows that in spite of the importance of the metric, specifically the costs thereof, all the schemes do not have a coherent approach to this discussion. Reports on annuitization are “beyond the scope” of the scheme, while others appreciate the cost factors associated with annuities they report that “people [schemes] don’t think about annuities” and that the scheme is not “involved at that level”.

These reports have far reaching implications for members and the country alike. Members must appreciate that they are alone, as the price of annuities are not regulated in statute, but left to the market mechanism. Government on the other hand can use the gap to come up with an appropriate response.

It is something of a travesty, as reported under Code 010, that the crisis-bound private pension system is compulsory across a large number of employees and employer groups. In general compulsion is welcome, but the governance responsibility that accompanies it can at the best of times drown the system. So a mixture of compulsion and voluntary arrangements is possibly the most optimal combination.

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This section shows some of the vexing issues coming out of the research and, in specific ways, the agency problems associated with the contributory pension system. The last section recommends further research and recommends an in-depth look at the need for IRR, its visibility and the member education required. In this way members would know what performance is in the pension scheme environment and be able to insist on accountability in the event of non-performance. To the extent that the contributory pension industry acknowledges the need for IRR, the implementation is long overdue.

6.2 Conclusions of the study

There are many areas in which system leakages occur. This section summarises the major findings with a view to make some recommendations. In the literature we learn that the pensions market has multiple managers and many commission-earners to be efficient. The industry has lost the advantage of economies of scale when huge pension resources are spent on advertising and sales commissions, something that a mandated system would side-step with ease. Given that the study finds that the IRR is not clearly stated and visible to members of pension schemes, including the commercial scheme variety, the behaviours which contradict IRR have thrived. It seems that there are tensions between disclosing IRR and the system charges, which lead to leakages and runaway costs as reported by the National Treasury (2013, July 11) in *Charges in South African Retirement Funds*. Costs are incurred with no clear accountability. This is confirmation that the system is not only unsustainable but it clearly needs policy intervention.

Although anecdotal the decrease in age parameter from 65 years to 63.3 years reported in the Alexander Forbes study is a cause for concern. While changes in the labour market shown through an average 8 jobs during working lives, points to inadequate pension resulting from lack of preservation. While accountability around investment returns is moribund the incidence of inadequate returns continues.

The conclusion that an intransigent pricing mechanism linked to purported economies of scale prevalent in commercial schemes is largely incongruent with the requirement of IRR has been demonstrated. The evidence from respondents suggests there should be a link between fees charged and the achievement of IRR targets. Commercial schemes are focused on creating large enough schemes to benefit members from through economies of scale. In the intermittent period the members suffer the prejudice of the current pricing structure. The absence of price (administration and asset management fees) transparency also probably contributes to high fees as there is no price competition.

The information from the research show that the invisibility of the IRR mechanism has resulted in the kind of administration costs and ineffective accountability system reported here. From the above it seems that the visibility of the IRR mechanism holds out the promise to improve the governance system. It is assumed that members will understand and take up the challenge of bringing the necessary accountability to their retirement nest egg. Where the system is adjusted to bring the change about, a system wide education campaign may be of benefit to the members who need to take on more responsibility for their retirement in a market that has hitherto shown no signs of penitence.

6.3 Recommendations

It is encouraging that commercial scheme respondents do conduct and publish research and make recommendation to the regulators. From the responses it is clear that the respondents themselves understand the need to make IRR visible to the member. This development is positive and they would do well to commit to the implementation thereof, perhaps with independent oversight, to help them improve pension outcomes and accountability in the schemes they run. Perhaps the budget used in the *intervention unit* at the SuperFund could be used to fund the implementation of IRR, not just as a best practice, but as part of enhanced accountability. The implementation of the intervention can be undertaken by a third party who is not conflicted as currently perceived.

The research suggests a nexus exists between IRR and membership compulsion. The compulsion comes through the company recruitment process and through collective bargaining. This is an interesting aspect of the private pensions system. It is possible members are not aware of IRR because they assume either the company (recruiter) or the collective bargaining representatives have access to the discussion and the merits of IRR and are acting on their behalf. This is however not the case.

Indeed all respondents agree on the need for the state to intervene. However, this could be regarded as a way to legitimise their abdication to act accountably in the members' interests. Particularly as government intervention is typically slow to materialise. Although state intervention is proposed for specific areas such as forced preservation, most schemes can afford to bring about changes in more areas where they are less than efficient. Perhaps a state agency can bring about the required changes in the cost structure, investments, subsidised contributions (from general tax revenues) and, ultimately, a transparent IRR regime to which all must aspire. However, regardless of the options going forward, this research has identified material performance gaps in the private system of retirement which need to be addressed one way or another.

6.4 Suggestions for further research

While the contributory pension system in South Africa is robust by all accounts it underperforms in very important respects. Hence the industry (the three schemes interviewed represent over a million members) is crying out for regulatory interventions in key areas of scheme design and practice.

The runaway costs of administration (and absence of price competition), non-preservation, low salaries and low contribution rates reflect the channels of inefficiency systemically lowering IRR. Promoting transparent IRR targets and making it part of the accountability mechanism in the contributory pension system in South Africa offers an opportunity to improve the system.

The proposed reforms in SA will involve the government in the administration of part of the future pension system, while the other parts remain in private administration. Total or partly enforced preservation is also mooted. These issues partly solve the problem of costs. It is generally known that economic growth will improve salaries. This is an area for future research.

Moreover the literature suggests there are too many schemes and too much commercial activity that needs resources such as marketing and commissions. Further research could shed light on the impact of consolidation on the industry and whether this should be promoted through policy. If the industry consolidates there may be fewer resources spent fragmented services in the value chain, and consequently more resources to fulfil the requirement of IRR.

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APPENDIX A (Interview Schedule)

SECTION A

Problem statement

It is not clear what effect knowledge of the *pension replacement ratio* measure has on contributory pension plan choices. Officials of Alexander Forbes Administrators and Old Mutual Administrators and a PO of a Pension Plan will be surveyed to answer this question.

Purpose

The purpose of this research is to explore whether knowledge of pension replacement ratio has effect on pension members' choices.

Research question

Does the visibility of income replacement ratio measure affect member's pension choices?

Research sub-questions

Adequacy Measure

- What is the current average % contribution rate towards your pension plan? Describe how a rate decision was arrived at? What returns are you targeting from investment activities? Have you done a cost comparison to see if the cost structure of your fund is competitive? Do members access accumulated contributions in the fund when changing jobs? What is your understanding of pension preservation? Does it influence your behaviour at all? Is it true that a clearly stated IRR by a Board of Trustees, measurable periodically over 5 year cycles, has the potential to positively affect all areas where leakages occur?

Targeting

- How much of members' current income will they need to replace upon retirement? Are members on target to meet their IRR? Explain
- Is there a need for an exercise to ascertain the IRR shortfall in relation to a specific target needed upon retirement?

Standard of living and family support

- Do annuities affect standard of living in any way? (e.g. choice of single or survivor protection annuities)
- What consumption items (old or new) do you think members will continue to consume post-retirement? Has this been checked with members themselves? Explain
- Do you know which of your members have children, and is there information that their children will have completed their education when members retire? Explain
- How far away is your family from what will be your retirement home? Do you think they'll support you in your hour of need?

Respondent	
Interview Date	
Time	
Area	

SECTION B (Scheme demographic profile)

Kindly place a cross (X) in the appropriate box.

Demographic profile of fund members (average age of members)

1. Age

20-25	26-35	36-45	46-55	56+

2. Sex, marital status and education (gender split, average level of education and marital information)

Gender		Level of Education				Marital Status		
M	F	P	S	T	N	S	M	W

3. Employment status

Employed – fulltime	Employed – part time	Self-employed

4. If employed, how long on average have members been contributing to your current scheme?

Less than 1 year	1-3 years	4-10	11-20	21+ years

SECTION C (Questions about interventions in the scheme to bring about IRR)

Interview Schedule (Are there any 'interventions' to guide members towards meeting their IRR?)

- <u>Contribution rates (knowledge) vs pension replacement ratio</u>
  I (manager of fund official) aware of optimal contribution rates
  Member benefits will be equal to contribution plus investment returns

- <u>Policy framework (attitude and behavior)</u>
  Is membership of a plan compulsory?
  I am aware that preservation is legally allowed
  % preservation rates in the pension plan on changing jobs

- <u>Basic benefit management (practices)</u>
  I always check that administration and other costs in my Fund are aligned with industry. I take interest in the returns generated from investment activities of my Fund

- <u>Lifestyle</u>
  Is your pension plan your only source of income to fund members' post-retirement life?