G:ENESIS



Risk benefit provision through provident and pension funds

Research undertaken for South African National Treasury

17/10/2007: **VERSION 1.1**

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EXECUTIVE SUMMARY

Risk benefits will be of importance in any South African social security arrangement. The number of working age deaths is expected to exceed numbers of new retirements in the next few years by several times. Many of these deaths are due to HIV/AIDS and although their number could reduce with effective efforts to tackle the epidemic, a high number of working age deaths and disabilities is likely to remain a feature of the SA environment for some time.

A South African social security arrangement is expected to incorporate some risk provision, in line with widely accepted social security principles. These include the principles of *fairness* and *risk pooling*, which balance the extent to which individuals' benefits are related to what they contribute to the system, and the extent to which higher risk individuals are subsidised by the lower risk individuals. *Broad based*, possibly compulsory coverage will ensure that all individuals have access to the provision they require. *Efficiency* of provision is essential, particularly to ensure that low-income participants are not penalised by being forced to give up disposable income for poor or expensive service. The system as a whole needs to be *affordable* both to individuals and the state.

The current system of occupational-based retirement and risk benefit provision in South Africa meets some of these principles to a greater or lesser extent. The majority of formal sector employees have access to risk benefits either through a retirement fund or through a group insurance policy bought directly by their employer. On average this system provides its 5 - 6 million members with lump sum death benefits of 2 - 3 times annual salary at an average cost of approximately 2% of salary. Disability benefits consist either of a similar lump sum, or more expensive income benefits of 75% of salary, which on average cost about 1.5% of salary. Group risk provision is a R7 billion industry in South Africa, excluding uninsured provision of risk benefits. On the whole, the privately provided risk benefit industry is highly competitive, with six major players, and characterised by low margins and efficient administration.

As risk benefits are provided primarily through employer groups, the overall risk of anti-selection by individuals is minimised, as the primary reason for joining the employer group is not usually to access risk benefits. Group distribution reduces administration costs, while the fact that employers generally pays a cost of cover

related to previous claims experience ensures that the employer's incentives are to keep risk costs down. This also limits the powerful incentives for employers to abuse disability benefits as a way of shedding employees without going through the sometimes difficult and costly process of dismissing them.

The current retirement fund system uses boards of trustees, on which members are represented, to allocate survivor benefits to dependents of deceased members. This system is costly but ensures that benefits are directed to dependents most in need, often a difficult exercise when people may have multiple dependents with different relationships to the deceased.

Risk benefit provision is also characterised by limited penetration in the low-income market, both for the formally and informally employed. Around half of those earning less than R60 000 in formal employment are uncovered, as are most individuals in informal employment. The high penetration of other risk mitigation products, such as legal and illegal funeral insurance, points to problems other than lack of demand for these products. Low penetration of group risk benefits is also ascribed to small or semi-formal businesses, which lack the capacity or will to set up the structures required.

In the current arrangements there are limitations to the pooling of risk which happens between members. Older or poorer individuals can have mortality risk as much as twenty times higher than their younger or richer counterparts. Within a single employer scheme, at any point in time there are extensive cross subsidies that exist between members of different ages, incomes and occupations. However, between schemes with systematically different age and income profiles there is little cross subsidy, beyond the pooling of normal random variation in risk which the insurers take on.

In deriving design principles for a national arrangement, ideally the advantages of the current system could be preserved, whilst combining them with judiciously enhanced reach, and cost-spreading measures in line with principles outlined above. Compulsory extension further into the formal sector appears feasible, where there is a case for incentivising rather than compelling involvement of the formal sector. It also needs to be acknowledged that the risk of lower income people tends to be higher, since income is highly correlated with danger of occupation, HIV prevalence, general health behaviour and education. The implication of this is that a national system with expanded coverage into lower income groups could double

the overall cost of risk benefits. Further cost increases through anti-selection effects are likely if voluntary individual membership is permitted. Additionally if employers lose the incentive to manage their own risk pools through AIDS and disability management programmes, costs will further increase.

A national compulsory scheme could automatically generate desired levels of risk pooling between individuals, but will produce winners (the currently uncovered) and losers (the currently covered). Some kind of solidarity transfer between current arrangements could preserve their efficiencies and incentives but also achieve a degree of risk pooling.

The benefits provided in a national arrangement are primarily intended to provide income security, although this may not always be efficient. Survivor benefits will primarily need to support dependent children until maturity and, to a lesser extent, dependent spouses, who could still be expected to participate in some way in the labour force. Disability benefits should be set at a level low enough to disincentivise false or malingering claims, while careful consideration needs to be given to continued death benefits and retirement contribution waivers while disabled.

It is important that decisions on risk benefit provision are well integrated with other benefits that will be provided within a national scheme, including retirement provision (as accumulated retirement benefits can be paid out to offset the cost of a death benefit), and unemployment benefits (to perhaps cover risk contributions during periods of unemployment).

1. INTRODUCTION

Given South Africa's history of inequality and the high prevailing levels of unemployment and poverty, preventing destitution particularly in old age or in case of the death of a breadwinner, is an important government goal.

South Africa currently has a sophisticated, tax-incentivised private pension and provident sector, which also provides a package of group risk benefits to its members, primarily including salary-related life and disability cover. However, this private provision appears to be outside the reach of most of the population. This is evidenced in the fact that as much as two thirds of the population reach retirement age without adequate private provision and therefore rely on the means test-based state-provided social old age grant (National Treasury, 2007). On the retirement side there have been additional concerns raised around governance issues in and the value for money provided by these vehicles, and the negative impact on value due to early withdrawal of funds from these vehicles. On the risk side, while the market seems highly competitive there have been additional concerns that the actual level of risk pooling and cross subsidisation that occurs is limited.

In an attempt to address coverage and other issues, both National Treasury and the Department of Social Development have over the last few years released discussion documents on Social Security and Retirement Reform. Between them they set out proposals for a basic contributory social security system as well as improvements to the working of the private retirement fund industry. Amongst other things, it is proposed that the system will include disability and survivor benefits, also known as risk benefits, alongside typical retirement benefits. This means that if a member becomes disabled or dies before retirement, a benefit in the form of an annuity and/or some lump sum component will be paid out to the member or to surviving dependents.

The interdepartmental task team on social security reform is reviewing the social security structures currently in place in South Africa, in respect of retirement benefits and benefits covering a variety of risks including disability, death, unemployment, etc. Part of this process is the mapping of current benefit provision and evaluation of this provision on the dimensions of coverage, cost, efficiency, etc. The second part is an evaluation of alternative means of benefit provision which address the problems identified, including but not limited to provision through a national contributory arrangement.

This piece of research considers the provision of risk benefits under the current arrangements, particularly through provident funds. It aims to examine current provision with particular reference to value for money and features of access by income, with the overall aim of providing the National Treasury with better information with which to make decisions regarding the proposed national social security system.

The document starts with an outline of the principles which should govern a system of national provision, then describes why risk benefits will be an important part of such a system in South Africa. We then describe the proposal terms and scope of the study before presenting findings of the evaluation of the current arrangements in SA, and suggesting how these produce considerations for the design of a more comprehensive system.

2. BACKGROUND

2.1. OBJECTIVES AND PRINCIPLES UNDERLYING NATIONAL SOCIAL SECURITY

We evaluate current mechanisms of risk benefit provision and potential future arrangements according to the guiding principles identified by the National Treasury and Department of Social Development in their various discussion documents (National Treasury, 2007); (Department of Social Development, 2007). These can be applied to both retirement and risk benefits provision and include:

- Equity. This refers to ensuring fairness in contribution rates and benefits, in that people with the ability to pay more for their risk cover should pay more than those with less of an ability to pay.
- Pooling of risks. The risk profiles of low-income individuals are often dictated by circumstances beyond their control, and as such invite discriminatory practices in membership eligibility, pricing and benefit levels. The pooling of risks spreads the costs associated with a risky socioeconomic profile and facilitates access to products that would otherwise be prohibitively costly for such individuals.
- Mandatory participation. This recognises that given the option, people tend to
 underestimate future risks and fail to make proper provision for retirement or
 risk events. Mandatory contributions reduce the impact of this tendency to
 discount future risks for present consumption.

- Encouragement of voluntary participation. Incentives must be created to
 encourage voluntary contributions among the informally and self-employed,
 and that allow people already in national arrangements to easily top up their
 cover.
- Administrative efficiency. Administrative efficiency directly impacts on the sustainability of retirement and risk provision. This involves the use of modern information systems as well as a streamlined collection and payments process.
- Solidarity. For the extremely poor and other vulnerable groups, social assistance grants financed through general revenues is most appropriate

Evaluation of current provision and risk provision under the proposed national scheme is done according to the following criteria:

- Adequacy. Benefit provisions should be suited to the general income needs of a large cross-section of the population
- Affordability. Affordability of a national scheme is not limited to the impact on households but on the national economy as well.
- Sustainability. A system that places undue pressure on state resources is unsustainable in the long run, therefore tradeoffs must be considered between equity and efficiency in the design, management and administration of risk benefits in a national scheme.
- Robustness. The system as designed must be able to withstand economic and demographic shocks.

The following additional principles as outlined in the DoSD discussion paper also apply:

- Inflation-linked adjustments. Adjusting benefit levels regularly to match changes in CPI for instance ensures income protection.
- Additional Retirement Provision. Creation of an environment for the development of additional voluntary provisions for retirement income empowers individuals by allowing them to diversify their sources of income, ensuring greater income security.

2.2. THE IMPORTANCE OF RISK BENEFITS

Risk benefits have sometimes been seen as an additional rider to retirement provision, as it is simple and efficient to bundle these onto a retirement structure. However, this means that the importance of risk benefits in the overall retirement framework can be overlooked.

For instance, actuarial estimations show that death benefits will become increasingly important: an estimated 50 % of current 15 year-olds in South Africa will not reach retirement age (Anderson, 2007). This represents millions of households that could potentially face extreme hardship as a result of the loss of a breadwinner.

Death Rates and survivor benefits

Population and mortality projections of workers in South Africa shows that for the next couple of decades the number of people in the working age population dying before their 65th birthday is likely to exceed the number of people reaching the normal retirement age of 65 years.

The chart below contains projections for the next few years of the number of people reaching that retirement age and the number of people who die before reaching retirement age. These projections were developed using the ASSA 2003 AIDS and demographic model, using the standard model assumptions.

The number of people reaching retirement age in each year shows steady increase over the projection period, and obviously the number of retirement benefits in payment will grow cumulatively as well. However, the number of deaths before retirement age is several times higher and shows steady increases for women, indicating that survivor benefits should demand significant attention.

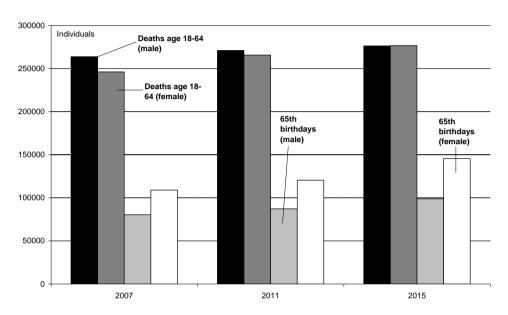


Figure 1: Projections of deaths and retirement figures of the working age population Source: ASSA2003 model

Obviously not all of the projected 500 000 or more deaths a year will be covered by a national contributory scheme. The number covered will be influenced primarily by overall labour force participation, and the extent to which the national scheme is able to penetrate the formal (including self-employment) and informal employment sectors. But these projections gives an insight into the population's relative benefit needs.

The majority of these working-age deaths are currently projected to be HIV/AIDS-related. This is the case especially for women.

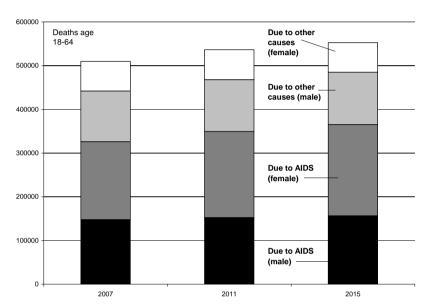


Figure 2: Main causes of deaths in the working age population

Source: ASSA2003 AIDS model

The demands on a national system of risk benefits will therefore be ultimately and heavily influenced by the progression of the epidemic and the speed and impact of measures taken to neutralise it. However, any change is unlikely to be rapid and demographics tend to react slowly so death benefits will remain an important consideration in the system for many years.

Disability incidence tends to be lower, except to the extent that AIDS could be included in the definition of disability. Incidence depends heavily on the tightness of the definition of disability used.

3. RESEARCH STRATEGY

OBJECTIVE AND

We understand that the overarching concern of the National Treasury is to understand how risk benefits could be better provided under a mandatory contribution national arrangement than under the current arrangements.

In addressing this issue, this research contains a review of current provision through private retirement vehicles, and based on our findings, considerations to be taken into account in the design of an inclusive, equitable, affordable and efficient system of risk benefit provision.

3.1. REVIEW

Our original mandate was to review the disability and survivor benefits currently provided by provident funds. However, in the course of our analysis, it became clear that there is extensive risk benefit provision by pension funds and also directly by employers not through a fund arrangement. In order to give a useful picture of employment-related risk benefit access these vehicles were also considered.

Our analysis promised to include investigation of the following aspects:

- The stakeholders in the industry. These include companies, administrators, insurers, members, regulators and many others.
- The split between defined contribution and defined benefit funds and between self insured and underwritten funds.
- The types of disability and survivor benefits currently being provided and the extent to which these are paid as lump sums or annuities.
- The number of people with risk cover through employer and fund arrangements, the number of people excluded from risk cover and the profiles of these two groups
- The size of the industry
- Any relevant trends in risk provision in the past ten to fifteen years
- The main benefits and weaknesses of current risk arrangements in the areas of coverage, level of benefits, efficiency and cost-effectiveness
- The main constraints to improved service delivery

3.2. SCOPE

The scope of our study does not include the following:

- A discussion of retirement benefits except as part of the initial scan and where relevant to disability and survivor benefits
- A discussion of other risk benefits associated with provident and pension funds such as grave disease/illness
- A detailed assessment and cost-benefit comparison of different risk products
- A detailed financial projection of costs and benefits to individuals or the fiscus
- A discussion of provident funds provided through bargaining councils, or benefits provided through retirement annuity arrangements
- A detailed investigation of international systems, except where of immediate relevance to issues encountered in the research
- An investigation into issues related to unemployment insurance such as a break in contributions

3.3. METHODOLOGY AND LIMITATIONS

Our research methodology consisted of:

- Desktop reviews of relevant public sector literature from the National Treasury, Department of Social Development and policy reports from the World Bank and other international policy institutions as well as industry reports and presentations
- Interviews with key stakeholders in industry, government and in international social security organisations
- Analysis of industry and demographic data collected from industry players and national surveys such as the Finscope South Africa 2006 study by the Finmark Trust and the StatsSA Labour Force Surveys

It is important to state that while our analysis is as accurate as possible, limitations in data and confidentiality issues ultimately affect quality and availability of information. Where data problems arose due to different time reporting formats and definitional issues we resolved these by using the most recent data available and reconciling differing definitions. In addition, we are awaiting submissions from the private pensions industry that we can use to provide a more granular analysis of retirement fund usage by income in a follow-up note.

3.3.1. EVALUATION AND DESIGN CONSIDERATIONS

We start with some definitional mapping and market description of the current provision environment. Evaluation criteria for these risk benefits have been grouped according to a set of themes, which will be used to frame the major design considerations which need to be taken into account in structuring a proposed national scheme.

Benefit provision. Benefits can take different forms as lump sum or income payments, defined benefits or defined contribution, and may offer different levels of cover such as 1, 2 or 3 times salary. In this report, we discuss these different options and issues to consider in the design of risk benefits.

Coverage. In looking at who has adequate risk cover and who does not, which risks are covered and which are not, we can examine in more detail the reasons behind low coverage among certain groups and better inform policy in respect to extending risk provision to the excluded.

Tradeoffs. The need for tradeoffs is a common refrain throughout this report. There are tradeoffs between efficiency and equity in the design, collection, administration and distribution of benefits. There also tradeoffs involved in the redistribution of risk, particularly the level of cross-subsidisation that offers the best mix of solidarity and sustainability. We emphasize these and other tradeoffs throughout our report.

Impact. Finally, we analyse the possible effects of the proposed national scheme on employees, employers, industry, unions and other powerful lobbies and highlight important considerations to be taken into account as the discussion on social security reform progresses further.

4. FINDINGS

4.1. INTRODUCTION

The underlying rationale for risk benefits is that they allow people to pool their experience together and rather pay the average claim cost than be exposed to the volatility of their own experience. And importantly in group arrangements this is done within an administratively efficient structure with a relationship of employment serving as the primary aggregator of the group. This section proceeds by giving a conceptual and empirical map of the retirement fund market, describing players, benefits provided, coverage of the system taken as a whole, its costs and the extent to which risks are pooled.

4.2. THE RETIREMENT AND RISK LANDSCAPE

4.2.1. **DEFINITIONS**

We use the terms scheme, arrangement or system to refer to any structure providing risk benefits to a group of people, on a national or employer level. Retirement funds can fall into a number of categories, which determine what they may and may not do and which regulations they are governed under. The following section outlines these categories, which are not mutually exclusive.

4.2.1.1. PENSION AND PROVIDENT FUNDS

The retirement fund industry in South Africa can be divided into pension funds and provident funds. This demarcation is defined in the Income Tax Act (No. 58 of 1962). However, both provident and pension funds are regulated by the Pension Funds Act No. 24 of 1956 and its many amendments.

The main difference between pension and provident funds lies in how the member receives their benefit on retirement, and this is what the Income Tax Act defines. A pension fund may only pay out up to one third of the pension benefits as a lump sum, with the remaining two thirds used to provide a monthly pension income until the member dies.

A provident fund pays out the entire benefit as a cash lump sum when a member leaves the fund, and the member may then spend the benefit as they wish. When a

member leaves the fund due to retirement, there is a tax incentive to convert the lump sum into an annuity.

Both pension and provident funds have rules, which govern their operation and specify contribution levels, benefits provided by the fund and provisions for the day to day operation of the fund. Retirement funds are run by a board of trustees elected by the fund members, who are also represented on the board.

The tax treatment of contributions to pension and provident funds are also different. Both member and employee contributions to pension funds are tax deductible, while only employee contributions to provident funds are tax deductible.

4.2.1.2. UMBRELLA FUNDS

There is an increasing trend in South Africa towards retirement provision through umbrella funds. An umbrella fund can be either a pension or a provident fund, with the difference between umbrella funds and other retirement funds being that there is more than one employer participating in an umbrella fund. Some umbrella funds are open only to employers from a certain sector, while others are open to any group of employees. Umbrella funds take advantage of economies of scale in terms of administration, particularly reporting requirements.

There have been some concerns around governance of umbrella funds, which are usually run by life insurance companies. This concern centres on the lack of employee representation on the board of trustees, which is a requirement of the Pension Funds Act. However, umbrella funds may apply for exemption from this requirement on the grounds of practicality. The board of trustees is therefore usually made up of employees of the life insurance company and the administrator of the fund, who themselves are not members of the fund. Much of the criticism has been that the interests of these individuals are not necessarily aligned with those of the members of the fund.

4.2.1.3. PRIVATE AND UNDERWRITTEN FUNDS

Retirement funds are also classified as either private or underwritten funds. Private funds are allowed to invest in any assets, subject to the provisions of the Pension Funds Act, and are required to submit audited returns to the FSB.

Underwritten funds are only allowed to invest in insurance policies, such that their assets consist entirely of claims against an insurer. Underwritten funds used to be exempt from submitting audited returns to the Pension Funds Registrar, as they were effectively registered by the insurance division of the FSB. This exemption has now been revoked and so underwritten funds are also required to submit audited results, although many have not yet done so. There are significant compliance costs related to submitting these results, and the FSB expects a large amount of consolidation within the industry in response to removal of the exemption.

4.2.1.4. APPROVED AND UNAPPROVED FUNDS

If a scheme is 'approved', this means that the scheme has been tax approved by the Commissioner for Inland Revenue. The premiums for such a scheme are tax deductible, but the benefits are usually taxed. For a scheme to be approved, it must contain an element of retirement funding.

If a scheme is unapproved, premiums form part of an employee's taxable income and so are taxed at the prevailing SARS rate, however the lump sum benefit paid out is tax free. Schemes which contain only risk benefits and no retirement funding are always unapproved.

4.2.1.5. DEFINED BENEFIT AND DEFINED CONTRIBUTION

A fund can be a defined benefit or a defined contribution fund. This is governed by the rules of the fund. A defined benefit fund determines the benefit payment that will accrue to the member on retirement, and sets contributions at a level which should fund this future liability. For example, a pension fund may specify that members receive 70% of their annual salary on retirement, and then set contributions at a level which will fund an annuity at this level when the member retires.

In a defined contribution fund, the contribution is set (usually as a percentage of annual salary), and this is then invested. When a member retires, she/he is paid out the amount she/he has contributed, as well as any investment return. This insulates the fund from investment risk and transfers this risk onto the fund member.

The risk benefit component of retirement contributions can also be treated as defined benefit or defined contribution. In a defined benefit structure, the fund rules will specify the death or disability benefit. Contributions will then be adjusted to meet the costs of purchasing this cover. In a defined contribution structure, trustees will cap the cost of risk benefits at a certain percentage of salary, and then purchase the maximum amount of cover possible for that amount. In order to provide members with better value in a defined contribution system, this is usually combined with dividing members into age cohorts, with each cohort receiving the maximum amount of cover possible for their capped contribution. This means that younger members generally receive more cover, while older members receive less.

4.2.2. INDUSTRY STRUCTURE AND FEATURES

4.2.2.1. THE GROUP RISK LANDSCAPE: OVERVIEW

The retirement fund and long-term insurance industries are closely interlinked. Most major insurers are active in the retirement funds space through provision of group risk benefits, administration and investment management. Other players in the industry, such as employee benefits companies and retirement funds themselves, interact with insurers on a number of levels. There are a number of pieces of legislation which define the institutional structures of the players and govern their operation in this market, the most significant of which are:

- Pension Funds Act (No. 24 of 1956)
- Income Tax Act (No. 58 of 1962)
- Financial Advisors and Intermediary Services Act (No. 37 of 2002)
- The Long Term Insurance Act (No. 52 of 1998)

This study focuses on risk benefits which are provided for employees through formal retirement vehicles. The employer therefore plays a central role in the landscape for group risk provision. Formal sector employers will usually make arrangements for their employees to access a number of employee benefits. These include retirement benefits and often some form of group risk cover. The diagram below provides an overview of the industry players and structure from the perspective of the employee's access to risk benefits.

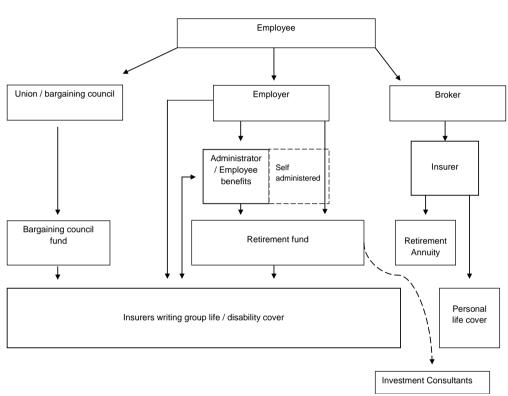


Figure 3: The Risk benefit Landscape from the employee perspective

Source: Genesis Analytics

Retirement funds. By this we refer to both pension and provident funds. An employer may choose to set up their own retirement fund, whose members consist solely of employees of their firm. This retirement fund will have a set of fund rules, and its members will elect trustees who are responsible for running of the fund. Smaller companies will generally have an underwritten fund as these are significantly easier to set up and administer than a private fund, and until recently benefited from a reporting exemption. The removal of this exemption means that umbrella funds are now a more popular choice for employers wishing to offer simple and cost effective retirement solutions to their employees.

Brokers. A broker is regulated in terms of FAIS, and may be independent or may work for an insurer or administrator. A broker will interact with insurers on behalf of

an employer or fund when obtaining group risk cover and even investment services.

Administrators. Employee benefits administrators can assist employers to design a package of employee benefits, including both retirement and group risk cover. The administrator can then provide administrative services, making sure that contributions and claims are correctly dealt with. Administrators may source a full range of employee benefits, which may not necessarily all come from the same institution. They might source risk cover from one insurer, investment management from another and provide administration services themselves. Some insurers also act as administrators, and may offer total "in house" solutions where they provide investment management, risk benefits and administration services. Retirement fund administrators have been the focus of much attention over the past year over allegations of 'secret profits' made at the expense of retirement funds. This issue is being addressed by government and the FSB.

Insurers. Long term insurers may be involved in several ways. As discussed above, some insurers offer administration services. Underwritten funds hold assets in the form of insurance policies offered by long term insurers, and these insurers also offer group risk benefits to retirement funds or groups of employees. Mostly these policies will be group policies. They are not defined as a separate line of business within the Long Term Insurance Act. However, any of the defined lines of business can be written as a group policy, which simply covers more than one individual and is usually not subject to individual underwriting.

4.2.2.2. MARKET SIZE

Retirement funds and administrators. At the end of March 2007, the FSB supervised 13 020 retirement funds, of which an estimated 4000 are dormant (FSB interview, 2007). While retirement annuities are included in these figures, these constitute only a small handful.

More than 80% of these funds have less than 50 members, and tend to be underwritten funds. The recent removal of the reporting exemption for these funds has resulted in most funds not submitting financial results, as they are still in the process of drawing them up. As of August 2007, only about 30% of funds had submitted a report to the FSB.

The group risk market consists largely of several big players, with the top five insurers accounting for more than 90% of the R 7.2 billion in group premiums written in 2006 (Swiss Re Group Volume Survey 2006). The group risk market is fiercely competitive, with the largest market share being around 20-25%, and industry indications are that the profit margins in this sector are small. The product being offered is relatively homogenous, with little substantial differentiation between providers. Innovative product development or service offerings by insurers to differentiate their product are quickly replicated by the rest of the market. The competitive nature of this market is reinforced by annual rebroking of group insurance products, where a retirement fund, employer or their brokers will shop around for the best rate on an annual basis. This forces insurers to keep their rates as competitive as possible.

Group risk business is a fairly small portion of insurers' total involvement in this whole space. Fund policies represent the bulk of insurers' participation in the market. These are classified as a separate line of business under the Long Term Insurance Act, and relate to the provision of retirement benefits. Underwritten retirement funds, whose assets consist entirely of claims against an insurer, hold fund policies from these long term insurers. In the 2006/7 reporting period, South African insurers collected premiums worth R111 billion from fund policies, which accounts for just over half of all long term insurance premiums collected across all lines of business (FSB, 2007). In the same period, R120 billion was paid out in benefits from fund policies.

There are currently around 200 FSB registered administrators in South Africa.

4.2.2.3. INTERMEDIATION

Risk benefits for retirement funds and for employee groups are sold as group policies. The commissions payable to brokers on group policies are governed by the Regulations to the Long Term Insurance Act (as are all other commissions on insurance products). These regulations take the form of a commission cap expressed as a percentage of the annualised premium payable on the policy.

Annualised premium (R)	Maximum commission as percentage of annualised premium under a group scheme or fund policy
0 -126 500	7,5%
126 500 - 218 500	5,0%
218 500 - 471 500	3,0%
471 500 - 1 380 000	2,0%
1 380 000 – Unlimited	1,0%

Table 1: Normal commission payable on group and fund policies

Source: Regulations to the Long Term Insurance Act

In addition to the normal commission outlined above, the regulations also make provision for the payment of a special commission, which is equal to the lesser of 7.5% of the annual premium or R5000.

In addition to the commission levels specified in regulation, intermediaries are also governed by the provisions of the Financial Advisors and Intermediary Services Act (FAIS). The FAIS Act was introduced to regulate market conduct in relation to advisory and intermediary services. In essence, it seeks to ensure that every person authorised to render financial services to a client is fully qualified to discharge this responsibility and that his/her conduct is professional, so as to improve the flow and quality of information in the market and to ensure that consumers enjoy full disclosure and are protected from unqualified intermediaries.

Intermediation is thus a highly regulated part of the market, and as such it does not seem that specifically on the risk side of the business there have been major abuses in terms of commission or misselling.

4.2.3. WAYS IN WHICH EMPLOYEES ACCESS GROUP RISK BENEFITS

4.2.3.1. RISK BENEFITS PROVIDED BY RETIREMENT FUNDS

Retirement funds can offer their members risk cover in the form of funeral, death or disability benefits. The fund rules stipulate whether and what types of cover should be offered to members. These rules are designed to provide the member with a benefit upon exiting the fund, and so can only cover death or disability events

which result in the member no longer being employed and hence having to leave the fund. Benefits which will continue to be paid after the member has left the fund, or that cover dependants who are not members of the fund may not be offered through the fund.

The table below summarises the kinds of risk benefits which may be offered by retirement funds.

Cover which a fund may provide	Cover which a fund may not provide
Death benefits on the members life	Income disability benefits: permanent health insurance (PHI)
Accelerators paid when a member leaves the fund (eg lump sum disability benefits)	Total temporary disability (TTD)
Member-only funeral cover	Accelerators which do not require the member to exit the fund (eg dread disease cover)
	Spouses life/disability cover
	Funeral cover which extends to family members

Table 2: Types of benefits provided in and out of funds

Source: Insurance industry

4.2.3.2. RISK BENEFITS PROVIDED BY EMPLOYERS

If a retirement fund does not offer risk benefits to its members, an employer may decide to provide risk benefits to its employees through a separate group scheme. This has the advantage of allowing benefits such as permanent income disability and cover for spouses to be offered. However, the scheme will then be unapproved as it does not contain an element of retirement funding, and so premiums paid by the employer will be considered a taxable benefit.

An employer can either approach an insurer directly for a quote, or will engage a broker to source cover. This broker is often an administrator or employee benefits consultant. Indications are that over 90% of group policies are placed with insurers by brokers, who will assist employers in structuring a suitable package of benefits for the most competitive price (Industry interview, 2007). Employee benefits

companies may be contracted by employers to provide the full range of benefits, including retirement savings and risk benefits. These may be sourced separately on a competitive basis, so while one insurer may invest retirement savings of the employees, another may provide the group cover and the employee benefits company will act as the administrator.

It is important to note that employee groups are not the only type of grouping that may purchase group policies. Insurers will offer a group policy to any "insurable group", which is normally defined as a group of people who have in common a relationship that is stronger than their need for insurance. This might include professional bodies, unions and bargaining councils. For the purposes of this study, the scope has been restricted to risk cover offered to employee groups, both though retirement funds and through separate schemes.

4.3. DISABILITY AND SURVIVOR BENEFITS CURRENTLY PROVIDED

4.3.1. INTRODUCTION

Employers and retirement funds offer risk benefits for two main reasons. The first is to ensure that in the event of the member dying, their dependants will not be left destitute. The accumulated savings of younger members are not likely to be sufficient to achieve this goal, and so additional life insurance benefits are provided. Secondly, disability benefits are offered in order to protect the member from the risk that they will no longer be able to earn an income and will have to leave the fund. As a member grows older, the need for these risk benefits diminishes, as his or her retirement savings grow, and many of his or her dependents become older and more self-sufficient.

After a member retires and exits the fund, any risk benefits offered by the fund are no longer available, although in some cases it is possible for the member to continue the policy on an individual basis with the insurer. The following sections will consider the types and level of death and disability cover currently provided in the South African group market, as well as the benefit payout procedures.

4.3.2. **DEATH**

4.3.2.1. TYPE OF COVER

Death benefits can take several forms. A lump sum benefit provides dependants with a once off payment. Provident funds generally only offer lump sum benefits, as in terms of the Income Tax Act, any benefits payable must be taken as a once off payment when the member exits the fund. Pension funds may however choose to offer a death benefit in the form of a spouse's pension. A separate group scheme could offer either a spouse's pension (income benefit) or a lump sum benefit, although indications from the retirement and employee benefits industry are that lump sum benefits are the preferred benefit type as they are significantly easier to administer.

The majority of retirement funds and group schemes provide lump sum benefits upon the death of the member. A recent survey found that 20% of retirement funds also provide a spouses pension which is usually paid in addition to an upfront lump sum benefit (on average 2x salary). A children's pension was offered by 17% of the funds surveyed (Sanlam Employee Benefits, 2006)

4.3.2.2. LEVEL OF COVER

The level of risk cover is almost always expressed as a multiple of the members' salary. This means that the absolute value of the benefit varies between members of the group. Data indicates that the average level of death benefits offered is 3.2 times the members' annual salary (Sanlam Survey, 2006; Anderson, 2007). There is however significant variation between funds on the amount benefit offered, which is ultimately decided by the trustees of the fund (or, in the case of a group scheme, by the employer).

Some funds offer members a degree of *choice* in their cover, allowing members to elect a higher level of cover if they wish. Only around 13% of funds allow members this choice (Sanlam Survey, 2006). The benefit levels are normally set in the fund rules, which have are agreed on when the fund was originally set up. Should a member require more cover, this is usually privately sourced and will be individually underwritten.

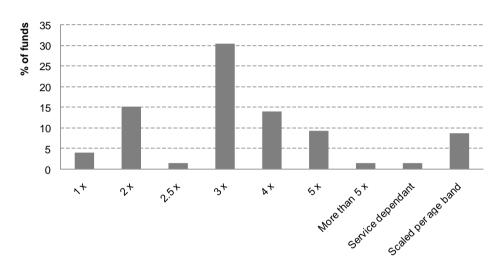


Figure 4: Levels of death cover Source: Sanlam Annual Survey of Retirement Benefits in South Africa, 2006

When a member of a retirement fund dies, their accumulated savings or *equitable share* is also paid out to their dependants. The process of paying out benefits from a retirement fund upon the death of a member is discussed in detail below, however at this stage it is important to note that funds may include the equitable share as part of the death benefit, or may pay it in addition to the lump sum death benefit offered to members. Funds that treat the equitable share separately add it to the death cover offered, so that dependants will receive a multiple of salary as well as any accumulated retirement savings. Funds which include the equitable share in the death benefit amount will only pay dependants the multiple of salary as specified in the fund rules, and so will top up the equitable share payout to reach this amount. Indications from the market are that around a half of funds now include the equitable share, although lower income funds (which tend to have more members) tend not to include the equitable share in the death benefit.

The attraction of including the equitable share in the death benefit lump sum is that the fund only has to insure the difference between the member's accumulated savings and the death benefit offered in terms of the fund rules, which reduces costs. In absolute terms, older members of the fund may be cheaper to insure as

their accumulated savings are likely to be higher, though this is offset to an extent by their higher mortality risk.

Some insurers offer other benefit features when writing group policies to either a fund or employee group. This is in an effort to differentiate products in what is a fiercely competitive environment for relatively homogenous products. For example, funeral support services include transportation of the body to the place of burial. These can be included as part of the group life policies written for retirement funds and separate schemes.

4.3.2.3. BENEFIT PAYOUT

Section 37C of the Pension Funds Act tasks trustees with allocating death benefits. When a member of a retirement fund dies, the death benefit and equitable share due to the member are not paid directly into their estate. Instead, Section 37C of the Pensions Funds Act gives the trustees of a retirement fund a degree of discretion in allocating the retirement benefits of a deceased member, which do not form part of the deceased member's estate, and so are not subject to the provisions of their will. The Act places a burden on the trustees to locate dependants of the deceased and to allocate the money to them in proportions which the board of trustees considers equitable. Dependants include anyone who was dependant on the deceased, including illegitimate children and common law spouses. If after 12 months the trustees cannot locate any dependants, the benefits are then paid to any nominee which has been specified by the member, less any debts held by the estate of the deceased. If there is no nominee then the whole amount is paid into the estate to be distributed as per the will of the deceased. If there are no beneficiaries to the will, then the amount accrues to the state Guardian's Fund¹.

Locating dependants may be complicated and time consuming. The process of locating dependants may be difficult, particularly as illegitimate children, common law spouses, and anyone who was partly dependant on the deceased member has to be identified in order for the allocations to be made. The mining industry experience indicates that many miners have two families, one from their rural hometown and one in the urban area in which they work. Both of these families

¹ The Guardians Fund falls under the administration of the Master of the High Court, and is a fund created to hold and administer funds paid to the Master on behalf of minors, persons incapable of managing their own affairs, unborn heirs or missing or absent beneficiaries from an estate. The Guardians Fund in South Africa has received consecutive audit qualifications in recent years.

have to be tracked down and assessed in order for the trustees to discharge their duties. Due to the often complicated nature of tracking beneficiaries, a significant time period elapses between the death of a member and the payment to their beneficiaries. In this time period (which should not exceed 12 months) the money does not earn any interest and the dependants are often left without an income, although trustees may make advance payments at their discretion.

Trustees exercise discretion in deciding between income and lump sum payouts. A provident fund has to pay out the death benefit as a lump sum. However, the trustees sometimes exercise their discretion and may elect to pay the benefits in one or more sums and in some cases pay the benefits due to a trust, which will administer them on behalf of the beneficiaries, usually to provide some form of income. The extent to which this happens varies between provident funds. Fund whose members consist mainly of low income workers, such as mineworkers, tend to pay benefits into a trust to provide income. The surviving spouse is usually paid a lump sum; however minor dependants' benefits are usually paid into a trust. Trustees usually take into account the financial literacy of members, with some funds even interviewing the main beneficiaries in order to determine their financial literacy and ability to manage a large lump sum. Trustees will also consider whether the funds available are sufficient to purchase an annuity yielding a certain income. For example, the Motor Industry Provident Fund will only use the benefits to purchase an annuity for the beneficiary if the annuity will pay at least R800 per month.

Although Section 37C places an expensive and time consuming burden on retirement funds, the overall principal is a socially attractive one. The provisions of the act aim to ensure that any dependants who were supported by the member while they were alive, continue to receive some financial support after they have died.

4.3.3. DISABILITY

4.3.3.1. TYPE OF COVER

Disability benefits have a more diverse range of benefit types. The precise type of disability benefit paid depends on how the risk benefit is being accessed. Retirement funds can only offer benefits which a member accesses on leaving the fund, and so offer lump sum disability benefits to their members. Separate

schemes can structure the disability benefit as they wish. In general, indications are that income disability benefits are preferred by members as they offer income security, although they tend to be more expensive. Currently, more than 40% of funds opting for separate schemes which provide a monthly income.

The level of monthly income is linked to a member's salary at the time of the disability event, usually limited to 75% The reason for this cap is that cover which provides more than 75% of a members salary is seen as an incentive for false or borderline claims on the policy. Some polices are designed so that members initially receive a monthly payment, and after a period has elapsed they are then paid out a lump sum.

It is also possible to structure lump sum disability cover as an acceleration of the death benefit. This means that if a member becomes disabled, they are paid out a lump sum as if they had passed away, and they are no longer covered for death benefits. This type of cover is usually cheaper than stand alone disability cover.

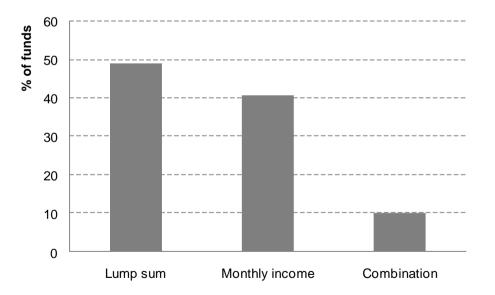


Figure 5: Types of disability cover
Source: Sanlam Annual Survey of Retirement Benefits in South Africa, 2006

4.3.3.2. LEVEL OF COVER

The Sanlam Survey (2007) indicates that average lump sum disability cover is 2.7 times annual salary, while over 90% of income disability benefits schemes provide claimants with 75% of their salary as an income benefit. Interactions with industry indicate that these figures are representative of current practices.

4.3.3.3. BENEFIT PAYOUT

An important feature of disability policies is the definition of disability used. A disability policy will use one of four definitions:

- Own occupation: the individual is disabled such that they can no longer be employed in their occupation
- Similar occupation for which a member is suited: the individual is disabled such that they cannot be employed in either their own, or a similar, occupation.
- Similar occupation for which a member may become suited: the individual is disabled such that they cannot currently be employed in either their own, or a similar, occupation; although with rehabilitation they may be able to find employment in a similar occupation.
- **Any occupation**: the individual is disabled such that they cannot be employed in any occupation whatsoever.

Before a claim can be admitted, an insurer will assess the member and evaluate the extent of their disability. This assessment procedure can be fairly complex and time consuming, as an insurer may require several medical opinions before admitting the claim. In some cases, an insurer may reassess the claim on a periodic basis, and the definition of disability may evolve over time. For example, a policy may pay out if a member cannot perform their own occupation for the first two years, and subsequently will only pay out if a member cannot perform any occupation at all.

It is particularly important for the employer and fund definitions of disability to be aligned. If not, there is the possibility that a member may no longer be able to work for their current employer, and so has to leave the retirement fund although the insurer refuses to admit their claim. This can result in the member being unemployed because they are disabled, and without income because the insurer does not consider them disabled in terms of the policy.

Disability management is an important part of disability cover, and is usually provided by insurers who have a vested interest in rehabilitating the claimant so that they can return to work. Depending on the definition of disability being used, an insurer may assist in re-training a claimant such that they can perform another job, or it may simply consist of ongoing assessment of the claimant's disability and progress. This type of management requires specialist skills such as occupational and physical therapy. Absenteeism monitoring programmes also aim to reduce the number of disability claims by identifying and treating problems early. These types of management and monitoring programmes have been successful in pre-empting claims, getting people back to work and reducing overall claims experience.

4.4. RETIREMENT AND RISK COVERAGE

A key reason for considering a compulsory national scheme is to address coverage gaps in the current system. This section describes those who are and are not covered for retirement and risk benefits splitting the population by income and whether or not they are in formal employment.

4.4.1. RETIREMENT FUNDS

The figure below illustrates membership in retirement funds and more specifically provident funds, as a proportion of employment sector.

Retirement fund membership in 2005 was 5.9 million. This means that 48 % of the total employed population is a member of either a provident or pension fund and/or is owner of a retirement annuity. Provident fund membership in the same period was 4.7 million, roughly 38% of the total employed population. It appears that provident funds represent a much larger proportion of the active retirement fund membership than pension funds and retirement funds combined. About 80% of retirement fund members are members of provident funds.

These figures contrast with self-reported membership of pension and provident funds, which is heavily underreported especially among low-income households (Finscope, 2006). Much of this is probably due to poor awareness of benefits which are automatic and compulsory with employment, and also unfamiliar terminology.

Some under-reporting of product usage is also suspected, especially for data collected from low income households.

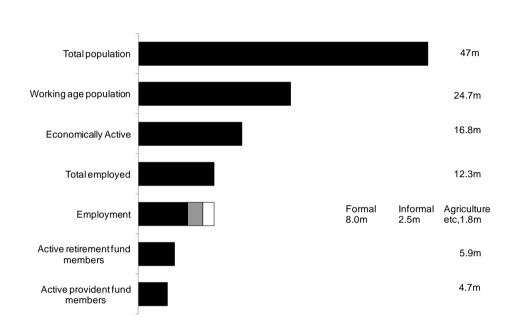


Figure 6: Retirement fund (pension and provident funds) coverage

Sources: FinScope South Africa 2006; Actuarial Society of South Africa, 2006; StatsSA 2006, FSB 2005

4.4.2. RISK COVER

Anecdotally, we know that the vast majority of fund arrangements provide some type of risk cover. Using FSB data on the number of funds with reinsured premiums (as this is often an indicator of risk provision); we estimated that at least 60 % of pension and provident funds provide risk cover. Based on this estimate, at least 3.5 million people or 28% of the total employed population have some form of risk cover through a fund arrangement. In contrast, 48% of the employed population is a member of retirement fund or has an annuity. This indicates a discrepancy of roughly 20%.

Overall, these figures indicate some penetration of formal risk products provided through retirement vehicles. There is an obvious gap in retirement and risk benefit provision within the employed population, but we need to determine where exactly these gaps exist particularly among the formally and informally employed.

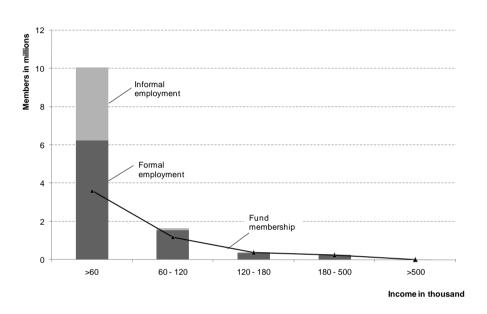


Figure 7: Fund membership by income for the formally and informally employed Source: Finscope SA 2006, Southey 2007

We focus on the formally employed as the figures for informal employment, are most likely to be underestimated and because the formal sector is the focus of Treasury at least in the initial stages of implementation of a National Social Security scheme.

The above figure shows fund membership among those in formal and informal employment according to annual income categories. Not surprisingly, most or all people in higher income categories (earning above R120 000) and employed in the formal sector are members of either a pension, provident or retirement fund. In other words, the retirement needs of people above the R120 000 income category are well covered. The story is quite different for those below this income level.

The gaps in coverage are most evident in the below R60 000 income category for both formal and informal workers. Of a population of 6.3 million formal employees earning below R 60 000, about 3.6 million or a little over 60% are members of a retirement fund. Therefore, roughly 2.7 million or 42% of the formally employed in

this income category do not have retirement coverage through a formal fund arrangement. Add to this number the 360 000 formal employees without retirement coverage in the R60 000 to R120 000 income category and the total number of formally employed without retirement fund membership is estimated at a little over 3 million individuals. This represents almost 40% of the formally employed below a R120 000 income threshold. By extension, this number also represents people without formal risk cover.

4.4.3. INDIVIDUAL RISK COVER

While many people in lower income categories may not have formal retirement arrangements that include risk cover, they may make use of individual products to cover certain risks such as severe illness, disability and death. These individuals may obtain individual funeral cover with a burial society, for instance. The figure below shows the number of employed people (again split by formal and informal activity) with individual risk cover for disability, life/survivor and funeral cover by income.

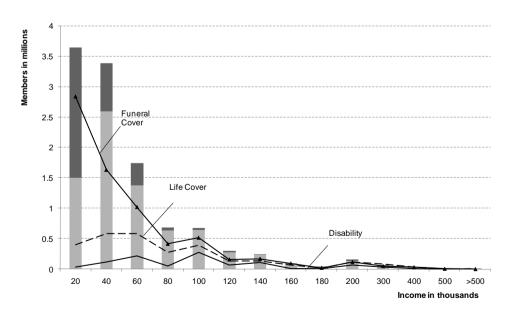


Figure 8: Individual Coverage by Income

Source: Finscope SA 2006

Funeral cover shows the most penetration, especially at lower income levels and among those in informal employment. Death or illness of a breadwinner ranks among the major risks faced by poor households in South Africa. Funeral expenses are high relative to income; and in many cases further impoverish the unprepared household. Therefore, it is no surprise that many poor households obtain funeral insurance in order to protect themselves from this risk.

Individual Life and Disability products show limited coverage across the entire population. Only at the R180 000 mark do we start to observe full coverage for the high-income population. There are several reasons why individual take-up of these products is low. Most notably, the means-tested disability grant may crowd out investment in disability insurance. In a national scheme, expanding coverage for survivor and disability benefits will be crucial to ensuring old- age income security

4.4.4. REASONS FOR POOR TAKE-UP IN THE LOW-INCOME END OF THE MARKET

Small businesses account for the majority of employees in the low-income end of the market (Industry interviews, 2007). In size they can range from small sole proprietor operations to companies with 30-50 employees.

These companies are often struggling to be profitable and therefore place lower priority on retirement provision for their employees. And if their employees are poor, this contributes to a high risk profile and disproportionately increases the cost of provision. The employees in turn, if paid very little do not welcome compulsory deductions from their disposable income.

Finally, from an administrative or reinsurance perspective, it is difficult and costly to perform cost effective underwriting for this group of employers. In addition, these small enterprises often lack the capacity to set up and administer retirement schemes. As a consequence, there is little incentive for brokers to sell retirement and/or risk products in this market.

4.4.5. RISK BENEFIT COSTS

The cost of risk benefits paid by retirement funds or employers is made up chiefly of a claims and an administration cost component, expressed as a percentage of payroll covered and applying for one year of coverage. Risk benefits and their own associated administration costs make up about 20-25% of total contributions paid

by employers and employees towards benefits (Sanlam, 2006). The remainder goes towards retirement benefits and their associated administration costs. In general, the employer pays for the risk benefits, a portion of retirement benefits and the administration costs, while the employee contributes towards the retirement benefits.

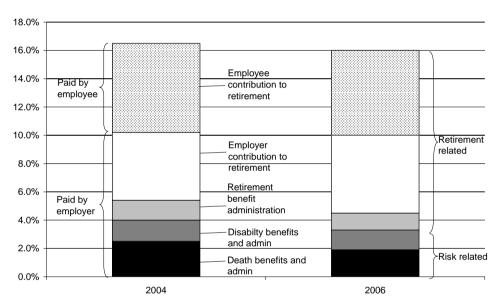


Figure 9: Retirement and Risk benefit costs

Source: Sanlam surveys 2004, 2006

Insurers do offer rate guarantees, giving rates for longer periods of cover up to a few years, however there is little demand for these, as ultimately the client has to pay an extra 10-15% for this guarantee anyway,.

Risk benefit arrangements for bigger schemes tend to be rebroked annually and insurers will compete for the business. Smaller firms are rebroked less often. The market for bigger schemes then is particularly competitive, and margins are reputed to be quite slim.

There is a rate cycle which operates in the market too. If one insurer starts offering particularly low rates the others are forced to match to keep market share. This happens until losses start coming through on the business allowing insurers to increase rates again. We are currently moving down the rate cycle, which is hurting margins.

Risk benefit costs tend to be higher where an element of benefit choice exists, as this increases administration and communication with individual members required, and also increases the risk of anti-selection by members, where higher risk members choose higher benefits for themselves.

Furthermore, income benefits tend to be expensive relative to lump sum benefits, as the administrative interaction with the client is prolonged over the duration of benefit payment.

In the next two sections we analyse in more detail firstly the claims portion of risk benefits, and secondly the administration costs associated with risk benefits.

4.4.5.1. CLAIMS COST

Apart from the specifics of benefit design, the expected cost of death and disability claims from a group is driven by several major *risk factors*, which are features of the group to be covered:

- A certain amount of random variation in experience;
- Age of members of the group risk tends to increase with age;
- Sex of the members over certain age ranges women tend to present more risk than men, and for other age ranges, vice versa;
- Industry type or occupation of the members certain occupations present a higher risk of job-related disability or death, e.g. mining; and
- Overall health status of the members, including HIV prevalence people with better overall nutrition and exercise habits tend to be lower risk, and obviously groups with lower HIV prevalence have lighter risk experience.

Death and disability rating factors

It is often not cost effective to gather this risk information directly, (e.g. with respect to members' health status), and so a set of proxies or "rating factors" are used instead so the insurer can approximately quantify the risk they are taking on.

For *big schemes*, past claims experience is used as the primary or only rating factor. Past claims are adjusted for inflation, any known changes in the risk profile of the group and used as an estimate of future claims experience. There is rarely any underwriting done on the scheme, i.e. any kind of health assessment of members.

For *smaller schemes* (generally under 200 members), past claims experience is too subject to random variation to be reliable as a measure of future experience. As a result, the age, sex and occupational profile of the group is usually measured directly. Salary levels and geographical area have been found to serve as a good proxy for overall health status and HIV prevalence, with higher income people generating lower levels of risk. Using their aggregated data insurers are able to map these rating factors onto premium rates in order to set a premium for the group.

Insurers have sometimes built a *conservative margin* into the premium to allow for uncertainty, particularly around the impact of HIV on claims. As the impact of the epidemic has stabilised, competition has forced this margin down.

Special factors influencing disability costs

Disability costs are further affected heavily by the position in the *business cycle*. In a downturn it is a widespread internationally and locally observed phenomenon that disability claims increase, as employers push unwanted employees onto disability as an alternative to the often difficult process of dismissing them. Aarts (2000) has noted that public disability insurance schemes suffer from the drawback that their presence not only affects the behaviour of the insured, but also that of employers and gatekeepers of the insurance. Since the costs of less than honest behaviour is not directly (or at least, not in the short term) passed on to employers or gatekeepers but carried by the state, there exists no incentive to limit the occurrence of dishonest claims. Moral hazard can emanate on the part of employers that are faced with the incentive to use disability insurance as an

"instrument of employment policy" to provide employees that would have been retrenched with access to a steady income. Similarly, the gatekeepers of a public disability insurance scheme may allow claims with dubious grounds to be approved, "both to reduce their workload and the psychological burden of being strict" (Aarts, 2000: 17).

The anti-cyclical relationship between government transfers and the business cycle is an often observed phenomenon. However, the *degree* to which total government transfers increase during periods of economic contraction or downturn is subject to a variety of factors. One of these factors, specific to a public disability insurance scheme, is the leniency of claiming rules and, specifically, the definition of disability. Alternatively viewed, this factor can be described as the susceptibility of the transfer system to abuse. Autor and Dugaan (2001), for example, find that the American unemployment rate would be at least 0.65% higher were it not for the more liberalised public disability scheme that started to employ less stringent screening rules after 1984. Specifically, they attribute reduced unemployment rates for high school dropouts, in a period when these individuals' predominant sectors of employment were subject to adverse labour demand shocks, to the presence of a less than strict disability scheme. Given the incentives faced by employers to use disability schemes as an easy retrenchment tool (see above), this is not a surprising finding.

The *impact of HIV / AIDS* on disability benefits is not completely clear. For some insurers, up to a third of their disability payments are AIDS-related. Other studies and interviews contradict this, saying that at least for disability income benefits, pay-out periods tend to be short. With anti-retroviral therapy, the time that an HIV positive person could be described as disabled by most definitions tends to be less than 6 months. Without anti-retroviral therapy this period tends to be even less as the individual dies more quickly.

Another key driver of disability costs (which applies to a much lesser extent to death costs) is the *level of benefit* on offer relative to current salaries. The higher the benefit as a percentage of current salary, the greater the incentive for the individual to make fraudulent or malingering disability claims. It has been an observed phenomenon in the South African market that a decline in benefit of 5% (e.g. from 75% to 70% of salary) tends to result in a decrease in disability incidence of around 5%.

The *definition* of disability used obviously has a major impact on the cost. The stricter the definition (e.g. that a person is unable to do any job at all) the lower the cost, compared to say a more permissive definition of disability (e.g. that a person is unable to do their current job).

A *waiting period* is often applied before someone can claim a disability benefit. This is designed to reduce anti-selection by members joining a group expecting to claim disability benefits. Clearly a longer waiting period produces a smaller risk cost.

The escalation level of any income benefit also clearly influences cost. Depending on inflationary expectations, a benefit linked to CPI, CPI plus a margin or with a fixed escalation rate will have different costs.

Resulting cost levels

Figure 8 indicates that the average cost of death benefits, and their associated administration costs is around 1.9-2.5%. Given an average benefit of around 3 times annual salary, this translates to a current cost of 0.6-0.8% of salary per 1 times salary benefit.

Disability benefits cost on average 1.4-1.5% of premium, lower than death benefits, mainly because incidence of disability tends to be lighter than deaths. For disability, the cost of income benefits tends to be greater than the cost of the average lump sum benefit (currently 2.4 times salary) (Anderson, 2007).

4.4.5.2. EXPENSES AND PROFIT

Risk benefits tend to ride on the infrastructure provided by retirement benefit structures, so it is a difficult exercise to separate all the administration costs associated with risk benefit provision. But industry estimates put the administrative costs of risk benefits at around 3% of risk premium for large schemes, and around 5% for the average sized scheme. Stiff competition in the market has kept these low.

But the administrative costs of providing risk benefits are mainly per person, rather than being fixed costs. They relate primarily to collecting premiums, and then assessing and paying claims, seen in more detail in the table of cost drivers below.

Expense category	Per member expense?
Product development	No
Sales process	Partly
New business – tenders	Partly
New business – contracts	Partly
Loading of scheme and member data	Partly
Medical underwriting	Yes
Monthly billing and income management	Partly
Monthly updating of member data	Partly
Commission payments	Partly
Reassurance calculations and payments	Partly
Lump sum claim assessments and payments	Yes
Disability claim assessments and payments	Yes
Ongoing disability reassessments	Yes
Annual review of individual scheme experience and scheme rates	Partly
Annual review of overall benefit experience and underlying technical rates	Partly

Table 3: Variable expenses *Source: Industry interviews*

The result of this is that the economies of scale reached by large groups run to a limit, so the expense experience of a group of one million members won't tend to be significantly better from one of ten thousand members. Risk benefits are very similar to retirement benefits in this way, and some evidence on retirement benefits administration costs is illustrative of the point.

	Number of members in fund	Average R cost per member per month
Umbrella DC arrangement	0-20	44.21
	20-40	20.07
	40-100	15.67
	100-500	10.78
	>500	8.94
	0-20	15.79
Union-sponsored DC umbrella arrangement	20-40	15.79
	40-100	15.79
	100-500	15.79
	>500	15.79
Government Employees		
Pension Fund	1.3m	17.76
Average fund supervised by		
FSB	-	17.91

Source: FSB returns 2004; GEPF returns 2005; Genesis calculations; LOA submission on umbrella funds

The table shows that costs can reduce substantially with increasing size, although once a scheme has more than 500 members further gains are quickly lost. Indeed they can even be reversed in a scheme over a million members strong. Administrative efficiency becomes a more important driver of costs than size at this level.

4.4.6. RISK POOLING

4.4.6.1. INTRODUCTION

As discussed in section 4.3.5.1, the claims risk that an individual presents in a group in any one year is determined by their age, sex, occupation, health level, etc. However, under group arrangements individuals may end paying (or their employer pays on their behalf) a premium different from their true risk cost. In this section we investigate the sources and extent of this difference, firstly looking at how true risk cost varies with the risk factors identified.

4.4.6.2. RISK DIFFERENTIALS

The following chart shows how the average mortality rate in the South African population varies with *age and sex*. It rises steeply after the teens for both sexes because of the impact of HIV and increasingly risky occupations or activities. There is also increased risk for females around childbearing age associated with different HIV impact, as well as pregnancy and birth risks.

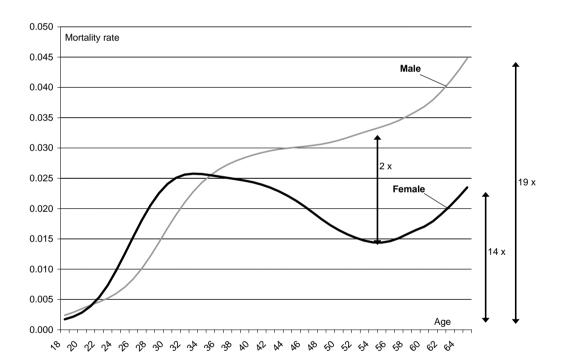


Figure 10: Mortality rates by gender and age Source: ASSA2003 AIDS model, standard assumptions

Assuming a countrywide average level for all the other rating factors (e.g. income, occupation, etc) the oldest working age male will have a true risk cost approximately twenty times that of the youngest. And the oldest woman will have a risk cost fourteen times higher than the youngest. While male and female risks vary relative to each other at their greatest extent males are twice as likely to die as females.

The true risk cost for an individual also varies substantially with *income*. Insurer pricing data indicates that holding all other risk factors constant, someone earning less than R2000 a month will tend to have a risk cost of about R18 per R1000 sum assured (excluding administration costs). Much of this is driven by higher HIV and generally poorer health in lower income bands. The true risk cost drops steeply with income and levels off around an income of R180 000 per year, from where improvements in health and HIV prevalence are marginal. But this means that individuals earning more can cost up to twelve times less for risk benefits than those at the lower end of the income scale.

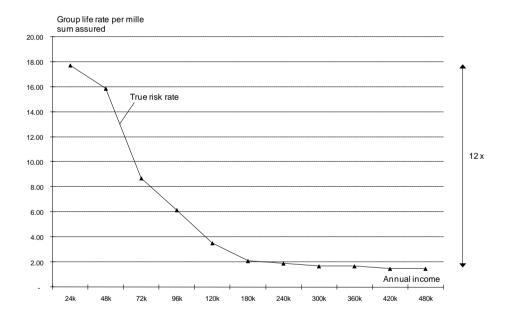


Figure 11: True risk cost by income

Source: Insurer data, 2007

True risk cost also varies systematically with industry. For example, insurer data and interviews suggest that some industries can be several times more costly than others, even holding other risk factors constant.

4.4.6.3. RISK-POOLING WITHIN SCHEMES

In group risk markets, individuals do not in general pay their true risk cost. The risk for the group in any one year is spread to a large extent. This is because the pricing generally is done in such a way that total claims for the group in the coming year is predicted and then this is expressed as a percentage of the entire group payroll. The resulting flat percentage of payroll is then applied to each individual in the group regardless of their actual risk cost. So low risk members of the group pay more than their real costs, and high risk members pay less. This can be shown diagrammatically as follows, where each horizontal line indicates the flat rate paid by a group.

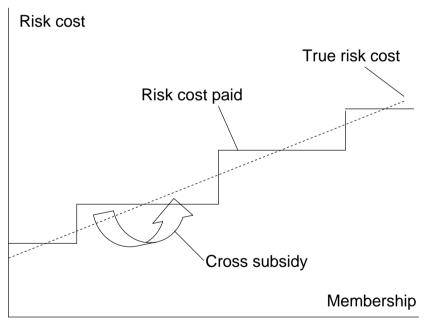


Figure 12: The mechanics of cross-subsidies

Source: Genesis Analytics

Because risk varies within a scheme by age, income, sex, occupational type and even geography, but the scheme tends to charge a flat percentage of salary, cross subsidies are generated. Thus, in any year, higher income people tend to subsidise lower income people, the young subsidise the old, etc.

The extent to which this happens in practice depends on how heterogeneous the scheme is to begin with. For example a scheme containing many high and many very low income workers will produce a substantial cross subsidy from the rich to the poor. But a scheme including only high income workers will produce a small cross subsidy from the richest to the rich. Some schemes are quite heterogeneous in these respects, but many employers by their nature will tend to employ many people of the same risk level.

The chart below shows the rough risk rate for an individual by income band. But it also gives a rough idea of the average risk premium that that person actually pays while part of a scheme, i.e. after cross subsidies have been generated. The difference between the rates is the cross subsidy either given or received. The chart shows that based on current insurer data, on average lower income people currently pay about 75% of their true cost, and higher income people pay over double their actual cost.

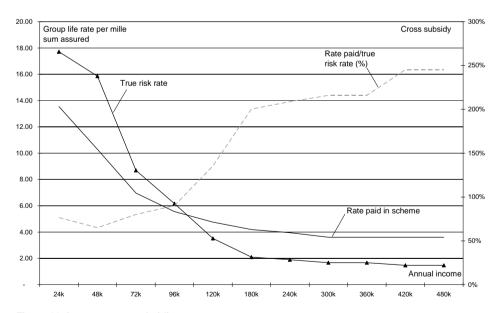


Figure 13: Income cross subsidies

Source: Industry sources (2007), Genesis Analytics

Cross subsidies also exist within schemes in respect of administration charges. Rand administration costs represent a higher proportion of a low salary worker's contributions than a high salary worker, so the fact that administration fees are levied as a percentage of salary serves to ensure that these are subsidised to an extent as well.

There can be limits to the degree of cross subsidisation that subsidising members will accept. As a result some schemes split membership between wage and salary employees, to break the cross subsidy between them. Industry sources indicate that this is not such a common practice in South Africa though.

4.4.6.4. RISK POOLING BETWEEN SCHEMES

In South Africa there is very little risk pooling between schemes, since in general each is rated according to their last few years experience or according to their own rating factor profile. The remaining random variation in claims experience which is not explained by past experience or the rating factors is what is pooled by the insurer. But there is otherwise no systematic way in which systematically lower risk arrangements subsidise higher risk ones. This can be seen in the following table, showing the cheapest and most costly premium rates (for a benefit of 1x salary) in different industries.

Industry:	А	В	С	D	E
Highest rate	0.1	0.06	0.11	0.11	0.29
50th percentile	0.44	0.42	0.73	0.61	0.82
Lowest rate	6.85	4.03	6.6	5.39	1.75
Maximum multiple	69	67	60	49	6

Table 4: Intra- and Inter- industry cost comparison

Source: John Anderson, presentation, 2007; industry risk costs, 2007

Different risk profiles of the schemes by age, income, sex, etc, result in greatly different premium rates, up to 70 times. This sort of variation is not reduced by umbrella funds either, which generally pool overheads, rather than risk between schemes.

4.4.6.5. RISK POOLING OVER TIME

We have discussed so far the pooling of risk in any one year of coverage between members contributing and claiming in that year. Risk pooling or cross-subsidisation can also theoretically take place over time if rates are guaranteed over the period. However, because schemes are re-priced so frequently based on claims experience, there is in practice relatively little risk pooling over time for any one scheme.

As a result of this, criticism has been levelled at the group risk industry that it is not really taking much risk at all away from the group, since the group simply has to pay for its poor experience in the next year. There is a degree of truth in this, but it is moderated by the fact that insurers are generally constrained in how much they can increase premiums in response to poor experience (generally a 10-15% increase is the maximum they can get away with), and so they do offer some level of experience smoothing to the group. Experience smoothing is enhanced by the fact that it is generally the last three years of claims experience which is used as the basis for setting premiums, meaning that the negative influence of one bad year is reduced. And the lack of interest by the market in longer term group risk products indicates that employers are relatively comfortable with the annual repricing and the level of claims smoothing they currently receive.

As people also age over time, the cross-subsidy paid by a person when they're young will be neutralised when they become the person receiving it when they're older. It is however difficult to communicate this phenomenon to members. Other rating factors may change less over time, for instance while incomes generally increase over age, one person is unlikely to move the whole way along the income risk curve in their lifetime, so in this case higher income people are likely to be net contributors to a scheme over their whole lives, and lower income people, net recipients.

4.5. INTERNATIONAL EXPERIENCE

To add to the evaluation of the current SA system, and to provide further empirical grounding for the development of design considerations we conducted a brief survey of risk benefits provided by other countries, for which this data was available.

A survey of international pension systems revealed several similarities in keeping with the objectives of social solidarity and old age income security. First, almost all systems surveyed, except Australia's superannuation system favoured income payments to lump sums. Secondly, the majority relied on prescribed formulas and/or nominations for paying out benefits.

Overall, there is a move towards simplified and decentralized processes for collecting, managing, investing and dispensing risk benefits. In Latin America, for instance, different bodies are responsible for different functions such as collection, management, disability qualification and regulation (Grushka and Demarco, 2003:3). The table below includes a subset of the international systems surveyed.

Country	Disability Benefits	Death Benefits	Reference period for calculating income
Argentina Pillar 2	70% (regular); 50% (non-regular)	Spouse:50-70%; Children: 20%	5 years
Australia Pillar 0	A\$928.40/month (single) A\$775.20/month (couple)	Spouse, children: A\$928.40 a month	N/A
Chile Pillar 3	50-70% (total) 35-50% (partial)	Spouse: 30-60%; Children: 15%	10 years
Philippines Pillar 0	12 times monthly pension (min. P1000)	Spouse, children: 100% pension	36 months

Table 5: International Survey of benefits

Source: International Social Security Association, 2003-2005

In the rest of this section, we will be focusing on risk provision in the Chilean pension system and the Australian pension system. These systems are a mix of state and private provision, where the state provides a minimum pension guarantee and the private sector manages individual accounts. We've been asked to focus on these two systems for the following reasons:

- As a result of the existing private sector retirement industry in South Africa, we believe that it is important to investigate mixed private sector – government/public sector provision under a national scheme. Chile and Australia provide good examples of such a mixed system in a developing and developed economy, scenarios that are relevant to South Africa's present and future.
- In conducting interviews and reviews of public and private sector presentations and papers, we realized that both the Chilean and Australian systems were the focus of much discussion in South Africa. In order to remain consistent with current thinking in policy and industry circles, we decided to limit our focus to these two countries.

4.5.1. RISK BENEFIT PROVISION IN THE CHILEAN SYSTEM

The Chilean pensions system is characterised by a multi-pillar system composed of three elements:

- A state minimum pension guarantee funded by general revenues for formal employees for retirees who have saved less than R200 000 pesos in their individual accounts;
- An individual capitalization system managed by accredited pension funds (AFPs); and
- A parallel state-funded PAYG system that is being phased out.

Death and Disability benefits are funded by employer contributions. Costs reportedly range from about 1% of salary including administration (Superintendency of Pension Fund Administrators, 2003), to 2.5% (Martinez, 2007). This is primarily a "pillar two" approach to risk provision of mandatory private saving managed by the private sector in collaboration with government (Holzmann & Hinz, 2005).

DISABILITY

The pension fund management company (AFP) selected by the member is responsible for purchasing a disability policy from a private insurer upon affiliation of a new member. This process appears to be competitive, but AFPs often have preferred providers of disability insurance and the price of insurance is always included in the overall quote for the individual account. Therefore, when an

employee chooses an AFP, he/she is also in essence choosing the preferred insurer(s) of the selected AFP.

Chile's pension system distinguishes between partial and total disability. In the former, the disabled individual must have lost 50% of their working ability. In the latter case, there must be total loss of working ability in any capacity. The evaluation and certification of disability is determined by regional medical commissions, funded and staffed by government but the private sector provides the additional material and human resources needed for proper functioning of the commission. Appeals are handled by the Central Medical Commission. The insurance companies are also involved in the evaluation process as they make use of their own medical teams. After the initial determination, the insurance company pays a provisional benefit for the first three years, after which another medical evaluation is carried out to certify the disability as definitive or the disabled individual as fully rehabilitated. In the event that the disability is deemed definitive, the pension is paid for the rest of the disabled individual's life.

DEATH

The process of take-up of life insurance for formal employees is the same as for disability insurance: through an AFP-affiliated insurer. Mortality tables based on age are devised by the Superintendent of Pension Fund Managers (SAFP) and must be used in the pricing of life insurance products. This apparent premiumsetting by the regulator has not negatively affected the insurance industry. Intense competition for the business of AFPs has led to a reduction in the cost of disability and survivor benefits from more than 2% of annual (taxable) salary in 1988 to less than 1% from 1992 onwards. Outsourcing of annuities and risk benefits to private insurance companies has allowed the market to grow much larger – by 2001, total social security insurance provided by insurance companies constituted 73% of overall insurance business.

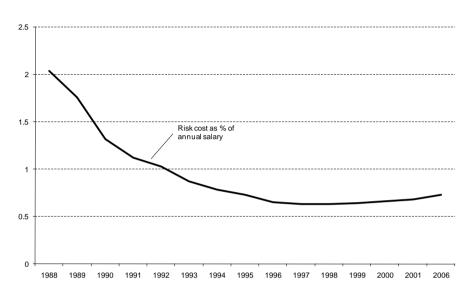


Figure 14: Declining Risk Costs in Chile Source: Superintendency of Pension Fund Administrators, 2003

Information on marital status, number of children and other relevant information are collected by AFPs during the initial process of affiliation and updated periodically. According to Gabriel Martinez, Secretary General of the Inter-American Conference on Social Security (CISS), nominations do not present major problems in Chile, as affiliate information is kept up to date by the AFP. However, he emphasized the importance of maintaining a complete database at all times. He believes that Chile has successfully mastered this problem.

Finally, the wording used to identify eligible beneficiaries takes into account the complex familial ties that may exist. Words such as 'spouse' or 'widow(er)' and 'legitimate children' are replaced by 'mother of dependant's natural children' to ensure that true dependants receive a portion of the benefits that is their due.

4.5.2. RISK BENEFIT PROVISION IN THE AUSTRALIAN SYSTEM

The Australian pension system is composed mainly of the following pillars:

 A means-tested social assistance program funded by general revenues and administered by the State.

- A mandatory occupational system of private pension funds called superannuation funds, similar to Chile's individual pension management companies. The self-employed are able to join these funds voluntarily.
- A voluntary pillar of private risk provision.

Disability and death benefits are funded through general revenues and administered primarily by the State. This represents a 'pillar zero' approach to risk provision that is essentially a government-run social assistance program. Superannuation funds do not provide risk benefits (International Social Security Association, 2004; Australian Government, 2007). However, individuals may source private life and disability products from private insurance companies. In addition, a life insurance policy can be sourced by an individual through a superannuation fund.

DISABILITY

Disability is defined as a 20 % reduction in working ability, due to a "physical, (Centrelink, intellectual and/or psychiatric physical impairment" (International Social Security Association, 2004). The inability to be retrained for work is also a determining factor. The monthly disability pension is funded from general tax revenues and payments are handled by a central government administrative body. The determination of disability is handled by private physicians and a Job Capacity Assessor. It appears that disability claimants are responsible for their own medical evaluation. There are several levels of appeal starting with an Authorised Review Officer (ARO), followed by a Social Security Appeals Tribunal (SSAT), an Administrative Appeals Tribunal (AAT) and ending with the Federal and High Courts (Centrelink, 2007).

The disability pension is subject to an income and assets means test and the benefit is scaled according to the income and accumulated assets of the individual. Higher income individuals are often excluded from cover based on this test and must arrange for their own private risk cover.

DEATH

The survivor pension is also administered by the same central administrative body and is also subject to a means test. A widow(er) with dependent children may claim these benefits.

The Australian system is advantageous because only a few key functions are handled by an authoritative central body, in this case, the assessment of claims and the payment of benefits. This ensures efficiency and keeps administrative costs low. On the other hand, the solidarity component is not as prominent. The individual bears most of the cost for obtaining a medical certification, applying for the pension, and appealing the decision if refused. Also, the pension is relatively high with a maximum limit of A\$537.70 (R 3296.13) for single individuals and A\$449.10 every two weeks. This can act as a disincentive for disabled workers who could be rehabilitated. The disability pension could also effectively crowd out individual take-up of individual risk cover.

5. DESIGN CONSIDERATIONS

5.1. INTRODUCTION

Several considerations around benefit structure design emerge from the local and international discussions above. In this section we present the general principles and specific decisions which will need to be made in designing a broad-based, contributory and compulsory national system of provision.

There are few concrete or detailed proposals currently in the public domain for the South African system, apart from an apparently broad consensus that the new system should:

- Be compulsory and contributory;
- · Extend more coverage to lower income earners; and
- Incorporate some involvement in aspects of benefit provision by accredited private sector providers.

This section therefore takes the form of a set of general considerations and implications for creating a benefit model, rather than an evaluation of existing, specific design models.

5.2. THE KEY DECISIONS

In creating a structure for benefit provision, the main choices involved are:

- The relative priority of risk and retirement benefits, and the institutional structures they'll be provided within
- Membership and coverage (linked to benefits and cost)
- What benefits are provided
- Who collects the money?
- Who performs the administration?
- Who carries the risk?
- · What cross subsidies exist?

5.2.1. INSTITUTIONAL STRUCTURE

5.2.1.1. RELATIONSHIP BETWEEN PROPOSED SAVINGS AND RISK BENEFIT DELIVERY STRUCTURES

The first consideration is to decide on the relative priorities of retirement and risk benefits within the proposed social security system. The system needs to provide both benefits, but the institutional structures best suited to delivering the one might not necessarily be the first choice for the other. If retirement savings were given more importance, then risk benefits would have to be integrated into the chosen institutional structure in the best way possible.

The high mortality rates illustrated earlier in this report show that in the South African context, in the first years of the system's operation risk benefits are likely to play a more prominent role than retirement savings. This is because more people will be dying than will be reaching retirement age in any one year.

However, initial thinking around the possible contribution split between retirement and risk indicates that retirement benefit provision is the priority, and so the majority of contributions will be channelled into retirement savings. Early estimates place risk benefit contributions at about 20% of total contributions into the system. A possible design consideration is to give relatively more emphasis to risk benefits in the early years of the system's operation, and then to shift resources towards the retirement savings component as the AIDS epidemic subsides and the population ages. This is however a complex issue, and is contingent on a number of factors such as the success of treatment or prevention programmes.

Collection of contributions will be an obvious area of overlap where collection systems for the retirement provision will allow cost effective piggy-backing of risk contribution collection.

5.2.1.2. PUBLIC SECTOR INVOLVEMENT IN BENEFIT ADMINISTRATION

Information gathered for this report indicates that it is unlikely that economies of scale surpassing those already achieved will be gained with centralised public administration of benefits. Large funds already achieve significant economies of scale, and the FSB is actively moving towards consolidating smaller funds where economies of scale do not exist. It is even possible that the efficiencies generated

by current competition between large private providers will be lost in a national system. The transition to a state system may involve public duplication of skills and systems that already exist in the private sector.

5.2.1.3. EXTENT OF OCCUPATIONAL AGGREGATION TO BE MAINTAINED

Currently group provision happens largely along employer, union or industry lines. Choice and payment of benefits happens at this 'grassroots' level rather than being decided at a national or regional level. This is consistent with a principle of devolving decision-making power to the lowest level it can effectively take place, and provides for improved flexibility, customisation to circumstances, and democratic oversight of risk benefit structures. A national, centralised system would reduce this aspect of member supervision and engagement and would effectively remove workers from the decision-making process in terms of how and what risk benefits are provided.

5.2.2. MEMBERSHIP AND COVERAGE

Compulsory membership is cheaper

Although compulsory membership of a state system may be seen as a restriction on individual freedom, it has significant benefits for certain sectors of the population.

The most significant benefit of compulsory membership is that it is, on average, cheaper than purely voluntary provision. This is due to a variety of reasons, such as reduced marketing costs by providers, a reduced need for underwriting, less scope for anti-selection, and some possible economies of scale. Furthermore, compulsory membership can counter ingrained features of human behaviour which tend to lead to people overly discounting the risks they face or their savings needs for the future.

Extent of coverage

There is broad consensus that the proposed national arrangement must reach further down the income range than current arrangements do.

However, reaching too far down the income range can be expensive and disruptive for people falling in the lowest wage categories. The lower someone's income, the greater the immediate demands are on that income, and the greater the impact of a compulsory charge on that income. Compulsory deductions are likely to be met with fierce resistance by individuals whose income is only just sufficient to survive. This supports the concept of a wage or other subsidy as discussed in current National Treasury proposals. This will also ensure that formalisation of workers continues to be incentivised rather that dis-incentivised.

Periods of unemployment

A further design decision will relate to how members are treated during periods of unemployment, and whether risk benefit coverage should continue, reduce or cease. It is important for risk benefit costs to be factored into the decisions being made by the unemployment insurance workstream in the social security program.

5.2.3. BENEFIT DESIGN

One of the most complex and challenging set of decisions that will need to be made is the benefit design for risk benefits provided in a national scheme. This section outlines some of the main issues that will need to be considered when designing the risk benefit package for participants in the proposed national social security system.

5.2.3.1. NEEDS

The overarching consideration and point of departure when considering an appropriate benefit structure for a national system is the needs of those who will receive the benefits provided. A careful balance needs to be struck between these needs and the implications, particularly the cost, of providing such benefits.

Survivor benefits

Survivor benefits should be designed to cushion the financial impact that the loss of a breadwinner has on their dependants. In general, this impact will chiefly affect the member's immediate family, consisting of a spouse and children. In single income households, this impact can be particularly devastating.

The needs of survivors will vary according to individual circumstances, but in general household expenses and expenses incurred whilst raising any dependants will form the bulk of these needs. A surviving spouse will be able to enter the workforce, whilst surviving children will not. This means that the needs of surviving children will be relatively more important, and should be explicitly catered for in the proposed system. The needs of both children and a surviving spouse will decline with age, as assets are accumulated and children leave the household to become economically active themselves.

It is also important to note that there may be other dependants who are not the spouse or children of the deceased member. This is particularly true in the South African context where, for example, migrant workers often have more than one household to support, or non-legal guardians raise children. Consideration would have to be given towards the needs of these dependants, and a decision made as to whether they would be catered for within the system. There could also be situations where a deceased member has no dependants, in which case there is no need for survivor benefits.

Disability benefits

The needs of someone who has recently been disabled and can no longer participate in the labour force are considerable. Without any means to support themselves they will be fully reliant on any disability benefits provided under this system. These benefits should therefore make provision for income replacement, as well as other costs associated with disability, such as rehabilitation. In the case of disability due to mental ill health, benefits should be payable to a third party who can administer them on behalf of the claimant.

A further need of those claiming disability benefits is that for continued death cover. Disability cover is often designed as an acceleration of the death benefit. This means that upon disability, a payment is made and the death cover ceases. Although this is well-suited to retirement funds, where members exit on claiming a disability benefit, it is more problematic in a state system where everyone remains a member. If death cover ceases when a member becomes disabled, this could still expose the family to financial difficulty if the member were to die whilst receiving the disability payments.

5.2.3.2. BENEFIT LEVELS

Lump sum versus income benefits. In determining the level at which benefits should be set, the first consideration is whether lump sum or income benefits will be paid. An income benefit will provide a monthly payment to beneficiaries for a pre-determined period, whilst a lump sum payment is simply a once-off cash payout to any beneficiaries, which can be utilised as the beneficiary sees fit. Whilst income benefits may be better suited to providing income security, they are administratively more complex and place an ongoing administrative burden on the state or other provider. However, a lump sum payment may be mismanaged by beneficiaries, leaving dependants with no income security.

Income benefits are usually set as a percentage of the members salary. If an income benefit is paid, the level of this benefit will have to be set. Current practice in the industry is to set the benefit as a percentage of the members annual salary, which will then be paid to the dependants. This could be split between a spouse and children. For example, a total benefit of 60% of the members salary could be split into 30% for a spouse and 15% each for two dependent children. The higher that the percentage is set at, the higher the cost of the risk benefit. A minimum benefit should probably be set to avoid making small payments which carry relatively high fixed administrative costs. Below this level it may be more cost effective to pay benefits as a lump sum.

Lump sum payments are usually expressed as a multiple of the members annual salary. Once again, a trade-off between a level that will allow dependants some degree of financial security and the cost implications of the cover will have to be made. Although measures could be introduced to induce beneficiaries to invest the lump sum in an annuity to provide income security, beneficiaries have complete discretion over how they will spend the money. Once the lump sum has been paid out to the family, no further support is available. If the money is spent on immediate expenses with no future planning, the family may be subjected to financial hardship. In recognition of these problems, provident funds often invest lump sum payments into a trust on behalf of beneficiaries. However, some funds will not purchase an annuity for dependants unless the monthly income from the annuity will exceed R800. It may be necessary to set such levels in a national system, and determine at what level a lump sum payment may be more efficient.

For disability payouts, a significant factor will be the definition of disability used in the benefit design. If the benefit is designed such that only people who can no longer be economically active are able to benefit, then income security seems the logical choice, despite administrative complexity associated with payments of this type. Lump sum provision may rapidly be spent on medical costs, and is more open to abuse by other family members. In South Africa, current income disability policies pay an average of 75% of income on disability. This is seen as the maximum level of cover which does not provide excessive incentive to claim to be disabled. However, this type and level of cover is costly and despite its attractiveness may place too much of a burden on the system.

5.2.3.3. PERIOD OF BENEFIT PAYMENT

Lump sum benefits are easier to administer, as once they are paid there is no further obligation on the state. However, if income benefits are the preferred vehicle then the period of benefit payment will need to be determined.

Dependent children may receive an income benefit until reaching maturity, although in some countries this benefit continues if the child continues studying. The logic behind such a structure is that once a child has reached maturity then they should be able to provide for themselves through economic activity. However, while under the age of 18, they have no means of supporting themselves and so are of particular importance in deciding on a benefit design.

Spouses may receive an income benefit until they reach retirement age, after which any savings from their employment will provide an income. The assumption is that a surviving spouse will in time be able to undertake some form of economic activity to provide an income, and so will not be entirely dependent on the benefit payments for an income. Whether this holds true in the South African context of high unemployment and a large informal sector is a matter for further investigation.

Disability payments present a different set of considerations. It is possible that a member may be contributing towards retirement savings up to the point at which they become disabled. After becoming disabled, the member will receive a benefit. This benefit could continue until retirement age, when the member's retirement benefits will become due. However, during the period of incapacity the member will not be contributing to their retirement savings. A solution to this may be a contribution waiver benefit, where contributions towards retirement are made on

behalf of the member. This is currently available in the group risk market as an "add on" to disability cover, however it has cost implications for the system.

5.2.3.4. INCLUDING THE MEMBERS EQUITABLE SHARE

It is important to decide whether the member's equitable share (their accumulated retirement savings) will be included in the risk benefit payout, or will be added to this payout. This depends to a large degree on whether income or lump sum benefits are chosen as the preferred method of benefit payment.

If lump sum benefits are selected, then the equitable share could be added to a defined risk benefit (eg 1 x annual salary), with the whole amount considered as the death benefit. The alternative is to provide a defined benefit of a multiple of salary, and absorb the equitable share in this payment. As discussed elsewhere, this results in cost savings as only the difference between the equitable share and defined benefit has to be insured.

If income benefits are the preferred method of benefit payment, the issue becomes slightly more complex. From a cost perspective, using the equitable share to fund part of the income benefit is most efficient. A more costly alternative is to pay the equitable share as a lump sum, and simply provide the risk benefit as an income on an entirely separate basis.

The precise structuring of the risk benefits will determine the best treatment of the equitable share. The structuring of the retirement benefits will also determine this. Under defined contribution arrangements the equitable share is an easily understood and transparent number, but under defined benefit arrangements its calculation is based on many assumptions and is not obvious to the member.

5.2.3.5. BENEFICIARY NOMINATIONS

Currently, section 37C of the Pension Funds Act governs the disbursement of death benefits from a retirement fund. As has been discussed, although this system is motivated by social concerns, it places a time-consuming and expensive burden on trustees of these funds. A decision will need to be made as to whether this system will be retained in a national system, or whether there will be a movement to nomination of beneficiaries. A further option is to adopt a set of rules

for the division of any death benefits, taking into account numbers of spouses and children.

Adopting the provisions of 37C in a national system will place a huge burden on state resources. Identifying the dependants for every member of the system who dies will be time consuming. This is exacerbated the more the administration of the system is centralised. Currently, trustees rely on their proximity to the member and their colleagues to identify dependants. A centralised system would have to conduct arms length investigations, which would be open to dispute by individuals who feel that they have a legitimate claim but whom have been excluded. If the large degree of discretion currently exercised by trustees, who are directly accountable to members, was passed on to state officials there may be opportunities for corruption and abuse.

A nomination system could remove much of the complexity from the processing of death benefits. However, there are other problems which may occur. A member might nominate individuals who are not real dependants, leaving legitimate dependants without financial support. If the member does not nominate anyone, for whatever reason, this could also delay payment of the benefits. Lastly, nominations could be outdated, not taking into account children conceived subsequent to the nomination process.

Internationally, a rules based system is often used. This type of system determines set formulae for determining who receives what portion of a benefit. For example, a spouse may receive 50%, and children the remaining 50% of the benefit. Allowances can be made for illegitimate children and cases where there are no children. This removes any discretion from the system. However, more complicated family structures with more than one spouse and many dependants may be difficult to incorporate into this system.

The different mechanisms for identifying beneficiaries implies that a choice about the extent to which a trade-off between equity and efficiency may need to be made. Whilst a rules based system may be efficient, it may not produce the most equitable outcome. Section 37C produces largely equitable outcomes with but is not always efficient - in the case of one large retirement fund, salary expenses related to 37C investigations constitute the largest administrative cost. Achieving balance between equity and efficiency, social solidarity and administrative cost is an important consideration in the design of a national scheme.

5.2.3.6. INTEGRATION WITH OTHER BENEFITS

It will be important to make sure that the risk benefits of a national scheme are well integrated with the disability and child support grant benefits. They should not be substitutive but rather additive, to encourage contributions into a national system and prevent formation of a benefit trap. As discussed, the risk benefit design is to some extent reliant on retirement side decisions regarding the calculation of equitable shares of retirement benefits. Additionally, risk benefits should be taken into account in the design of the unemployment benefits, and whether these should cover the ongoing payment of risk contributions on behalf of a member who is unemployed for a period.

5.2.4. INCENTIVES

A positive aspect of the current risk benefit arrangements is that there is a link between contributions and claims experience. It is not usually feasible for groups aggregated in the first place by an employment connection to use this link to select only good risks for membership of the group. But it does generate incentives for the group to manage its risk and therefore its claims.

Disability and HIV management programs have been the most successful examples of this, bringing down the costs of lump sum and income benefits. Abandoning the link between group contributions and experience would undermine the incentives for groups to provide these services, and would probably result in sharp increases in death and disability costs. Out of a fixed pool of contributions this would in turn mean that less contribution is available for retirement benefits.

5.2.5. COST LEVELS

As discussed in previous sections, the current cost of 1x cover in South African arrangements is, on average, 0.6% of salary (Industry sources; Anderson, 2007). Projections and calculations of future costs depend obviously and primarily on the extent to which coverage is extended, but the cost of a countrywide benefit at the same level is estimated to be around 2% of salary, predominantly because the lower income people included in the system bring a much higher mortality risk (Industry estimates, interviews, 2007). Given that the HIV epidemic now appears to be stabilising, this figure is not expected to change substantially in future and should ultimately reduce as the disease is brought under control.

Limiting membership of the national arrangement to formal sector workers will limit the cost, with rough estimates of 1.3% of salary. This could however increase rapidly if membership is open to voluntary participation to the informal sector , largely due to a strong anti-selection effect.

5.2.6. RISK POOLING

The current system provides fairly limited risk pooling, particularly between schemes that have different risk profiles, e.g. by income, age or industry. It may be desirable for a national system following the principle of solidarity to set up cross subsidies between these different risk groups. The extent of the cross subsidy will be limited in part by the extent to which low risk groups are prepared to accept a requirement to subsidise higher risk people.

The mechanism of the cross subsidy could take several forms.

Having a flat contribution rate across the covered population

This would involve imposing a flat percentage of salary charge on the whole membership of a unified arrangement, along the lines of the 1.3% or 2.0% of salary discussed above.

While this can generate desired cross-subsidies, a single risk pool will destroy the incentives for groups to manage their own risk. Depending on how the administration is handled, it could reduce the market efficiencies currently being realised. It could also crowd out a large part of the group risk industry – it has been estimated that up to 50% of revenues will be lost if the national scheme covers individuals earning up to R120 000 per year (Southey, 2007).

Using a risk equalisation fund (REF) mechanism

The REF used in the medical schemes market is the most well-known example of a mechanism of this type. The design principle is to define a set of risk drivers along which higher risk schemes receive a subsidy from the central fund, and lower risk schemes contribute to the fund. So for example, a set of formulae would be determined under which younger schemes have to pay more into the REF, and pass this cost onto their younger members. Older schemes would draw from the

fund according to a formula. But to the extent that the scheme is able to manage its risk beyond the equalised drivers it does not have to contribute to the REF, for example, a scheme which is able to select or encourage its members to stop smoking will not have to subsidise a scheme which does not, so the first scheme will be able to offer lower contribution rates and attract more members. This preserves some incentive for the individual schemes to manage their risks.

In a national system providing risk benefits, a similar mechanism could be set up to achieve solidarity goals between group schemes, cross-subsidising by selected risk drivers like income or age. But critically, it would leave incentives in place for risk management by individual groups, e.g. through HIV or disability management, since groups offering these services would be able to charge lower contributions or extract higher profits. A mechanism of this broad type could permit greater solidarity while not destroying the structure of the current industry or destroying the market efficiencies and incentives.

On the downside, these risk equalisation mechanisms are administratively complex and there are enormous incentives to cheat or manipulate returns to the REF to demonstrate a more favourable risk profile. In addition to leaving incentives to manage risk they leave incentives to cherry pick good risks along the risk parameters which are uncompensated by the REF. Using the employment aggregator can reduce this effect, but it could apply powerfully to the way schemes target the formally or informally self-employed.

5.3. IMPACT ON EXISTING INDUSTRIES

Some national social security proposals where impact has been tested have assumed mandatory participation below an income threshold of R60 000 per annum. In practice inclusion in this system would probably extend up to a R120 000 per annum income threshold as it will probably be more cost-effective for these people to save additional amounts in the national system rather than setting up private vehicles for additional saving.

The implications for private industry are varied. First, there is a potential market loss, if we assume that those below the R120 000 income threshold will transfer to a national scheme. The reduction in business volumes could be accompanied by a loss in revenues, reduced ability to spread fixed costs over membership, a smaller risk pool, and a rise in costs as demand for lump sum benefits fall.

5.3.1. IMPACT ON MEMBERSHIP

A study by ASSA members Colin Southey & Howard Buck (2007), found that 81% of current retirement fund membership falls below the R120 000 income category using a sample of 1.4 million members belonging to registered retirement funds (excluding GEPF) which represents a third of the existing industry. This represents a substantial loss for the private retirement industry in terms of business volumes, should these individuals switch to a national scheme. Data provided by industry and anecdotal evidence from some of the large union or sectoral funds reflect this same pattern. Roughly 80% of current membership could potentially be lost to a national provider if it replaced current provision arrangements.

5.3.2. IMPACT ON INDIVIDUAL RISK

Studies conducted by members of the ASSA estimate that 47% of private pension risk premiums could be lost to the (national) scheme. This represents a loss of R3.6 billion in annual group risk premiums for the private industry.

Industry interviews we conducted also corroborated these figures. According to our interviewees, about 40-50% of risk premiums will be lost at the R60 000 threshold alone, representing R3–4 billion in annual risk claims.

5.3.3. IMPACT ON EMPLOYMENT

There are also direct implications on the size of the industry through consolidation. According to an Investec survey of the retirement industry, 20% of funds would consider closing down or reconsider their existence. About 80% of funds have fewer than 50 members and would probably move towards consolidation as part of their membership base becomes subsumed under a national scheme.

This impact on industry is important from an employment perspective as well. Some funds rely heavily on trustees, investigators, medical staff, and a large administrative team to assess and monitor claims and to handle benefit payouts. Interviews with industry players suggest that a large number of jobs will be lost, although the exact figures are still largely unknown. Serious consideration should be given to investigating the impact on employment in the risk market.

5.3.4. IMPACT ON LOW-INCOME, UNION FUNDS

Union Funds face particular changes in light of any proposed national scheme. Interviews with key industry players suggested that labour movements are heavily involved in negotiations over benefits and costs (Sandile, 2007). In addition, union leadership is often involved in the management of fund, and this influence is an important bargaining tool and means of catering to and retaining their power base. Under a national scheme, they would lose some of their bargaining power, their engagement with members on benefit payment, as well as whatever control they may have over the management of these funds.

This has serious implications for political buy-in among labour groups. Therefore, there must be very careful communication between government and the relevant groups in order to ensure that this political risk is managed properly.

MEETING LIST

Type of organisation	Organisation name	Contact	Position
Government	Department of Social	Alex van den Heever	Advisor, Council for Medical Schemes
	Development	Rob Rusconi	Independent Actuary/Consultant
Regulator	Financial Services Board	Alta Marais	Senior Specialist, Retirement funds Research and Policy
		Lorraine de Swaart	Systems Manager, Retirement Funds
Insurers	Sanlam	Deon Booysens	Senior Manager, Employee Benefits
		Marelize Tau	Marketing Manager, Employee Benefits
	Old Mutual	John Kotze	Head, Group Assurance
	Liberty Life	lan Maron	Group Executive, Strategic Initiatives
	GenRe	Peter Temple	Managing Director
	Momentum Collective Benefits	Nico van der Walt	Chief Operational Officer
		Eric Welz	Actuary
Administrators	Alexander Forbes	Rowan Burger	Head, Consulting Strategy
Retirement Consultants	Fifth Quadrant	Mick Jenkins	Actuary
		Greg Hatzkilson	Actuary
	Riscura	Jarred Glansbeek	Chief Executive Officer
Provident fund	Motor Industry Provident Fund	Keith Webb	Principal Officer
	Mineworkers Provident Fund	Sandile Mbili	Principal Officer
Industry Associations	Life Offices Association	Gerhard Joubert	Chief Executive Officer
		Anna Rosenberg	Deputy Executive, Legal and Policy
		Tjaart Esterhuyse	Senior Manager, Risk Solutions (Met Life); Convenor (LOA)
International Institutions	InterAmerican Conference on Social Security	Gabriel Martinez	Secretary General

BIBLIOGRAPHY

Aarts, L. (2000). Disability insurance in a multi-pillar framework. *World Bank: New ideas about old age security.* Washington, DC.

Actuarial Society of South Africa. (2003). *ASSA 2003 AIDS & Demographic Model* . Retrieved September 25, 2007, from Actuarial Society of South Africa: www.assa.org.za

Anderson, J. (2007, August). Social Security and Retirement Fund Reform. *Actuarial Society of South Africa*.

Asher, A. (2007). Pension Benefit Design: Flexibility and the integration of Insurance over the life cycle. Sydney.

Australian Government. (2007). *Comcare*. Retrieved October 2007, from Comcare: http://www.comcare.gov.au/

Australian Government. (2007). *Disability Support Pension*. Retrieved October 2007, from Centrelink:

http://www.centrelink.gov.au/internet/internet.nsf/payments/disability_support.htm

Autor, D. &. (2006). The growth in the social security disability rolls: A fiscal crisis unfolding. Retrieved September 2007, from National Bureau of Economic Research: http://www.nber.org/papers/w12436

Autor, D. &. (2001). The rise in disability recipiency and the decline in unemployment. *National Bureau of Economic Research Working Paper 8446*. Cambridge, MA: National Bureau of Economic Research.

Board, F. S. (2007). Annual Report. Pretoria: Financial Services Board.

Congressional Budget Office. (1999). *Social Security Privatization: Experiences Abroad.* Washington, DC: US Congressional Budget Office.

Department of Social Development. (2007). *Reform of retirement Provisions: Discussion Document.* Pretoria: Department of Social Development.

Financial Services Board. (2005). *Annual Report.* Pretoria: Financial Services Board.

Financial Services Board. (2006). *Annual Report.* Pretoria: Financial Services Board.

Grushka, C. &. (2003). Disability Pensions and Social Security Reform: Analysis of the Latin American Experience. *Social Protection Discussion Paper Series*. Washington, DC,: World Bank.

Holzmann, R. &. (2005). *Old-age income support in the 21st century.* Washington, DC: World Bank.

International Social Security Association. (2004). *Social Security Programs Throughout the World: Asia and the Pacific, 2004 - Australia*. Retrieved August 2007, from Social Security Association: http://www.ssa.gov/policy/docs/progdesc/ssptw/2004-2005/asia/australia.html

International Social Security Association. (2004). *Social Security Programs Throughout the World: The Americas, 2003 - Argentina*. Retrieved August 2007, from Social Security Association: http://www.ssa.gov/policy/docs/progdesc/ssptw/2002-2003/americas/argentina.html

International Social Security Association. (2003). *Social Security Programs Throughout the World: The Americas, 2003 - Chile.* Retrieved August 2007, from Social Security Association: http://www.ssa.gov/policy/docs/progdesc/ssptw/2002-2003/americas/chile.html

International Social Security Associations. (2003). *Social Security Programs Throughout the World: Asia and the Pacific, 2003 - Philippinnes*. Retrieved August 2007, from Social Security Association: http://www.ssa.gov/policy/docs/progdesc/ssptw/2002-2003/asia/philippines.pdf

Mesa, A. B. (2006). The Chilean Pension Reform Turns 25: Lessons from the Social Protection Survey. *Pension Research Council Working Paper*, 2006-9.

National Treasury. (2007). Social Security and retirement Reform: Second Discussion Paper. Pretoria: National Treasury.

Sanlam Employee Benefits. (2006). *Annual Survey of Retirement Benefits*. Cape Town: Sanlam .

Sanlam Employee Benefits. (2004). *Employee Benefits Survey.* Cape Town: Sanlam.

Southey, C. &. (2007). *Impact on Retirement Funds.* Retrieved September 2007, from Actuarial Society of South Africa: www.assa.org.za

Superintendency of Pension Fund Administrators. (2003). Pension funds and their effects on related markets. In *The Chilean Pension System: fourth edition* (pp. 157 - 172). Santiago, Chile: Superintendency of Pension Fund Administrators.