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Building a Caring Society. Together.

social development

Department:
Social Development
REPUBLIC OF SOUTH AFRICA

Reform of Retirement Provisions

Feasibility Studies

September 2007

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Building a Caring Society. Together.

Foreword by the Minister

At the end of June 2006 the Department of Social Development distributed a discussion document, entitled *Reform of Retirement Provisions*, which was the first ever strategic review of the weaknesses in our system of retirement provisions. The review was undertaken within the context of international developments in retirement systems and local challenges that South Africans face upon retirement. We then indicated that "Our honest and frank reflection on South Africa's retirement provisions is that the system is in dire need of reform." Not only do we stay true to our assessment, as South Africans have indicated their agreement, we have remained steadfast in our principal propositions for change.

In the enduring spirit of "Asikhulume", which became part of our democratic inheritance since 1994, we have started a debate about pension reform, the commitment we are making to securing a dignified life for those in retirement, the need for improved savings levels in our country and the need for the private pension industry to work with government towards the objective of preventing poverty in old age. As we did then, we shall now also approach the issue from a normative policy point of view.

The discourse of retirement reform will therefore inevitably have to deal with the value we as a society decide to place on the provision of income security in old age. Within the context of the values inherited from our spirit of Ubuntu, the Department proposed a series of retirement reform measures, which include the removal of the means test to the old age grant, the implementation of a mandatory system of retirement contributions that will provide for combining defined benefit and defined contribution components, the need for risk coverage such as death, disability and sickness in old age, etc. The debate that ensued, and that continues to interest many, should now be about issues of the content of the benefit that people must get upon retirement, the desirable level of redistribution this society should consider appropriate, how the schemes should be managed, whether private or public, the level of contributions for healthcare in retirement, etc. We move from the premise that the normative criteria are treated as axiomatic, as an antidote to many of the opaque features of the current system.

This discussion document is aimed at ensuring that as our discussions progress we will be imbued with the commitment to collective policy formulation, be loyal to universality, dedicated to a compulsory system, and have the assurance of a consensus style of decision-making. Moreover, the norms enunciated here must be embodied in our envisaged legislation, which will ensure not only that the promises made by the current generation to the next are kept, but that measures aimed at protecting those who are saving for their own retirement are safeguarded.

Informed and guided by the Declaration of African Rights, the Freedom Charter and the new Constitutional dispensation, we remain solid in our resolve that the envisaged retirement system should be compulsory, comprehensive and contributory. The criteria and standards that we set should not be immutable, and, as things change, as they will, the system must adjust as the dynamics of our society demand. This notwithstanding, our proposed system will be informed by the five guiding principles adopted by the International Labour Organisation. These principles are:

- The extension of coverage to all members of the population;
- Protection against poverty in old age, during disability or on death of the wage earner for all members of the population;
- Provision of an income, and replacement of lost earnings as a result of voluntary or involuntary retirement for all those who have contributed;
- Adjustment of this income to take account of inflation and, at least to some extent, of the general rise in living standards;
- Creation of an environment for the development of additional voluntary provisions for retirement income.

The research documents presented here must now begin to inform our final resolutions of the retirement policy position that we must adopt. I will therefore once again call on every South African to get involved, exhorting all that retirement reforms are amongst the most profound social, economic and political changes made by countries. Be part of the debate as we now finalise the blueprint of a new system. *Nna motsaya karolo mogaetsho!*

Dr ZST Skweyiya

Minister for Social Development

Executive summary

Building a Caring Society. Together.

Executive summary

Background

The reports presented here form part of a series of technical reports commissioned by the Department of Social Development as part of the retirement reform initiatives of the South African government. Cabinet mandated the Social Cluster of Directors-General to establish a comprehensive social security system for South Africa. The components of the system are a universal non-contributory system (or social assistance), a mandatory contributory system and regulatory oversight of additional voluntary arrangements. Comprehensive reform of the entire social security system was described in the Taylor Committee report of 2002. By mid-2006 significant progress had been made in respect of the development of a strategic framework for the reform of retirement provision.

The framework recommended by the Department of Social Development involves the following elements:

- A universal basic State Old Age Pension (SOAP);
- A mandatory contributory of 15% tier for all income earners, which would provide for retirement and survivor benefits. It is suggested this may be split 50/50 into a defined benefit (pay-as-you-go — PAYG) portion and a defined contribution (DC) portion;
- The defined benefit PAYG component would encompass post-retirement protection in respect of medical scheme contributions as well as disability and survivor benefits;
- Government must establish and sponsor a Retirement Fund (GSRF), that will provide for the defined benefit component, and act as a default for defined contributions where the opt out is not exercised. The South African Revenue Service is well placed to collect the mandatory portion of contributions.
- Provision for individuals to opt out of the GSRF for the DC portion of the mandatory tier. An opt-out will only be permitted in respect of an accredited retirement fund.

In October 2006 the Department of Social Development issued Terms of Reference for a series of technical reports to more fully research and develop each aspect of the recommended framework. What follows is a brief summary of the first four reports.

Part One:

An Options Assessment with Respect to Making the State Old Age Pension Universal

1. Introduction

A universal State Old Age Pension (SOAP) can ensure that all South Africans, irrespective of earnings or occupation, can access a level of income in old age that is sufficient to protect them from poverty. This basic pillar of a pension system can effectively cover the entire population of older people.

Against the background of international experience, this report assesses some of the key issues associated with eliminating the current means test for the social pension, effectively making the grant universal. The report also examines some of the issues pertaining to a differentiated benefit level, and the potential synergies offered by integrating a universal pension into a comprehensive social security system. In addition, this study employs micro-simulation analysis and lessons from South Africa's experience to illuminate these issues.

2. The Rationale for a Universal Pension

Old age pensions can be implemented in different ways depending on the objectives of policymakers. For many countries undertaking pension reform or implementing a pension for the first time, addressing old age poverty is a key policy objective. Old age poverty can be tackled through a universal pension or a means-tested pension. A universal pension has several identifiable benefits. These include:

- It is simple to understand.
- It is inexpensive to run.
- It can reduce or eliminate old age poverty.
- It promotes equity.
- Future costs to the state are more certain.

Empirical studies have documented that older people often face a higher incidence of poverty than do other age groups. Older people often have more limited opportunities to generate labour income; they are more likely to face chronic illnesses and labour market discrimination and are unable to rely fully on traditional safety nets that are under pressure from rapid socio-economic change.

The Department of Social Development (DSD) has a stated objective of "protecting income to prevent poverty where savings will prove inadequate". Where poverty rates are high, as is the case in South Africa, and contributory schemes have limited coverage, an effective way to ensure that all older people do not face poverty in their old age is to provide a universal SOAP.

The argument for means-testing is based on the supposed reduction of the fiscal cost of pensions by targeting the poorest. However, a universal system may be superior to means-testing for a number of reasons. First, means tests increase administrative costs associated with the repeated verification of income and assets to decide whether older people should receive the benefit. Given that poverty is dynamic – people move in and out of poverty – targeting can become very costly, and the targeting criteria will require regular evaluation. Second, the tests promote perverse incentives. People have an incentive to remain poor if receiving a benefit is based on a defined income threshold. A means test can also discourage low-income workers from saving for old age. Third, means-tested benefits can be viewed pejoratively as hand-outs, which may lead to the stigmatization of beneficiaries and pose risks of eroding political support.

2.1 Summary

A universal SOAP is easy to understand and promotes equity. These are critical characteristics in addressing the legacy of exclusion and inequality found in South Africa.

The idea of a zero pillar is important for addressing absolute old age poverty. Additional pillars – whether two or more – are necessary for alleviating relative poverty in an inter-temporal sense – in order to smooth lifetime consumption.

A universal SOAP does not have the high administrative costs, social costs and adverse incentives associated with means-testing.

3. International Comparisons

South Africa was the first country in Africa to introduce a social pension in line with the Old Age Pensions Act of 1928. The South African social-protection system has evolved from one that was geared to cater for a minority to one that now broadly covers the entire population, providing increasingly effective support to the poorest and most vulnerable. Key statistics regarding South Africa's means-tested SOAP are detailed in Table 1:

Table 1: The South African Social Pension, 2007

Eligibility	Number of Beneficiaries	Beneficiaries (% of eligible population)	Monthly pension (US$)	Pension % of GDP per capita	Annual Transfer (% of GDP)
Citizens and permanent residents from age 60 for females and 65 for males.	2,205,105	90%	$130	31.5%	1.4%

Source: Department of Social Development

3.1 Summary

South Africa's eligibility criteria are comparable with those of similar countries that have universal pensions.

Coverage of South Africa's pension is excellent compared to both universal pensions and particularly other means-tested pensions in other countries.

The amount paid by the South African pension is generous by international standards, generating a substantial impact in terms of poverty reduction.

Based on international evidence and a basic assessment of costs, a universal SOAP is affordable for South Africa.

4. The Special Case of New Zealand

New Zealand is unique in that it is the only high-income country in the world with a universal SOAP and it has never had mandated contributory pension schemes. Thus, New Zealand has a two-pillar system – the basic pension and voluntary saving – in contrast to the three-pillar World Bank model. In 1997 a proposal to replace the SOAP with a mandatory, defined contribution scheme was defeated 12 to 1 in a referendum that drew a record 80% of registered voters.

It is worth noting that the two-pillar system in New Zealand is associated with a relatively low level of old age poverty. Approximately 5% of older people in New Zealand live in poverty compared to 20% in the United Kingdom. This distinct difference exists despite the fact that the United Kingdom has a significantly higher GDP per capita than New Zealand. The old age pension in New Zealand is not considered as merely a minimal safety net for the poor. At the same time, however, it is not expected to provide for all the needs of higher-income older people.

4.1 Summary

It is possible to provide adequate income support to older people without a mandatory contributory pension.

A universal SOAP is able to reduce old age poverty even in developed countries.

5. Feasibility of a Differentiated Benefit Level and Replacement Ratios

Currently, the social pension serves two different functions: (1) it provides basic social protection for older people, protecting them from age-related poverty; and (2) it substitutes for an earnings-related pension for those whose employers have failed to deliver workers' entitlements to adequate provision in their old age.

Based on available evidence, none of the eight universal pensions discussed differentiates benefits on the basis of employment. This suggests that South Africa would be the first country to benefit from a SOAP linked to past employment. Only in Mauritius are benefits differentiated, and this is done on the basis of age, with older pensioners receiving higher benefits. Higher benefits can be paid to older people with insignificant fiscal implications, because they constitute a decreasing share of the population.

A work-related non-contributory pension poses important questions regarding its scope – particularly regarding informal-sector and care workers. These questions imply important considerations for the required systems that would monitor compliance with the identified eligible work criteria. A work-related non-contributory pension with a future commencement date for eligible work paired with a once-off increase in the universal pension would be more administratively feasible than an option that depended on measuring past work experience. The future commencement date for tracking work would allow effective systems to be developed, and the once-off increase in the universal pension would provide broad compensation to low-income older people for the historical deprivation of a work-related pension.

5.1 Summary

The SOAP provides a high replacement rate for low-income earners. It is an adequate safeguard against absolute poverty following retirement for these workers. However, at its current level it would not allow all low-income earners to maintain their pre-retirement level of consumption. In addition, the social pension often serves as a broad-based household grant tackling poverty. A higher grant would provide better replacement income for more workers and would better serve the Department's objective of tackling poverty.

The option of a work-related non-contributory pension would require additional research in order to more completely define its scope, taking into account issues regarding informal sector and care workers. In addition, an option for a work-related non-contributory pension would need to take into account the requirement of appropriate systems for monitoring compliance with the identified eligible work criteria.

6. Linkages between the SOAP and the Broader Retirement System

Potential linkages between the provision of a universal SOAP and contributory pensions can lead to economies of scale with favourable implications for delivery, cost-effectiveness and policy coordination. International evidence on existing linkages is extremely limited. However, it is possible to broadly identify five types of synergies.

- Legislative Synergies
- Administrative Synergies
- Governance Synergies
- Fiscal Synergies
- Income Support Synergies

7. Recommendations

The South African and international evidence on universal social pensions – based on cross-country comparisons, micro-simulation analysis and South Africa's experience – provides a basis for recommendations with respect to making the State Old Age Pension universal as part of broader retirement reform.

It is recommended that the government eliminate the means test on the State Old Age Pension. This will facilitate integration of the social pension into a multi-pillar social security system and eliminate the social and economic costs of means-testing.

It is recommended that the size of the benefit be increased by an amount higher than the annual inflation-indexed adjustments. This will efficiently increase the poverty-reducing impact – in terms of both absolute and relative poverty – of the pension. It can also serve as compensation for low-income workers who have historically been excluded from contributory or other work-related schemes. A proposal for an explicit work-related non-contributory pension will require further definition of scope and depend on systems that track compliance with eligible work requirements.

It is recommended that the regulation and supervision of all private and public retirement funds are placed under common legislation. This is in line with a proposal for a South African Retirement Funds Act. However, it may be optimal to leave the universal SOAP under the South Africa Social Security Act (SASSA) of 2004 and the Social Assistance Act of 2004. SASSA has the mandate to manage, administer and pay social assistance.

It is recommended that the process of drafting the South African Retirement Funds Act consider the establishment of a specialized public governance agency. This agency could be established by expanding the mandate of the Pension Funds Adjudicator to cover issues beyond redress for pension and provident fund members. However, some governance aspects of the universal pension (such as complaints by pensioners not receiving their benefits) can remain within the mandate of SASSA.

Part Two:

South Africa's Old Age System:
Benefit Design Options

1. Introduction

South Africa is undertaking a review of the manner in which it provides for its elderly – a complex, multi-faceted process requiring considerable examination and discussion. Part four of this document describes the high-level technical analysis intended to support consideration of the fundamental elements of the design of this system. This is supported by a broader discussion on the advantages and disadvantages of the alternative benefit designs in the prologue.

Two models are crucial to this process of analysis:

- A long-term financial model considers the affordability of a number of design alternatives by estimating the cash flows expected under each alternative. This might be referred to as *the macro model.*
- An individual model estimates the retirement position of participants in relation to their pre-retirement earnings. Some would refer to this as *the micro model.*

Together, these models shed light on the characteristics of each of the options available to policymakers.

2. Design considerations

What are the considerations that should lead thinking on design of the system? Three may be considered, with a number of sub-themes under each of these. The first considers the level of benefit, the second the shape of the benefit across socio-economic classes and the third invokes the goal of risk-reduction through diversification.

- **Target replacement rates.** The level of benefits for participants in a pension system might be expressed in a number of ways. Not only is the replacement rate merely one of these measures, but it is subject to the set of assumptions used to project the pension and final salary. It is a good measure, but must be used with care.
- **Redistribution.** The shape of the replacement-rate curve reflects the extent to which low-income participants stand to benefit proportionally more than their wealthy counterparts. The extent to which redistribution is sought requires a balance between providing a minimum level of benefit to the poor and retaining sufficient financial benefit for the wealthy for this group to benefit from participating in the system.
- **Risk diversification.** Mixing different systems provides some protection against the risks to which participants in a single-component design would be exposed. This should be balanced against a pragmatic objective of scale within each component of the system, in the interests of cost management.

The recommendation set out below achieves this mix of objectives. Since there is no obvious best design, it is hoped that this recommendation provides a platform for objective discussion along the lines set out by these considerations.

3. Recommendation

The analysis suggests that within the bounds of reasonable financial uncertainty, the following set of benefits is affordable, at an overall contribution rate of 15% of total annual earnings above R12 000, and provides acceptable cross-subsidy from wealthy participants to poor:

- A **Basic State Pension** at the current levels, R800 monthly in 2005 terms, increasing annually at the average of price and wage inflation, payable from age 60 to all resident women and from 65 to all resident men, with appropriate automatic increases to the retirement age.
- A **Defined Benefit** for each year of service of 0.75% of annual earnings above R12 000 (constant in 2005 money terms), supported by a contribution of 6% of earnings defined on the same basis, payable from age 65 to men and women, with appropriate automatic increases to the retirement age.
- A **Defined Contribution** accrual of 6% of annual earnings above R12 000, with benefits receivable from a recommended age 65, also increasing in line with price inflation.

The long-term viability of the system depends on the implementation of a flexible set of parameters, the most important of which is the facility for automatic increases to the retirement age under the Basic State Pension and Defined Benefit components.

Part Three:

South Africa's Mandatory Defined Contribution Retirement Saving System: Provider Accreditation

1. Introduction

This report takes it as given that there is to be a

- mandatory pay-as-you-go (PAYG) social security system, incorporating the existing arrangement of Social Old Age Grants (SOAG), supported by compulsory contributions paid by all qualifying South Africans;
- mandatory individual account system, with contributions defined as a percentage of salary, that are channelled into a publicly managed fund, the Government Sponsored Retirement Fund (GSRF), but with the right of participants to opt out of this fund into an accredited private-sector fund of their choice; and
- voluntary additional contributions paid into any vehicle selected by the saver.

The report assumes that

- compulsion will establish a very large flow of contributions into the accredited fund environment; and that
- the standards imposed on the compulsory saving sector will have positive impacts on the equivalent standards in its voluntary counterpart.

At the time of writing there is uncertainty regarding the system of tax incentives applying to retirement contributions. The recommendations of this report are unaffected by this uncertainty. The scope of its discussion is sufficiently broad to apply to other potential system designs and its recommendations are unaffected by the potential existence of the PAYG system and, with small modifications, would apply also to a defined contribution (DC) system without a public-sector default.

Many commentators assume that the conditions for competitive provision of products and services to the compulsory DC system are already in place. The author does not agree with this starting position, pointing simply to the current marketplace for tax-incentivized retirement saving. A number of fundamental concerns with the operation of this marketplace can be identified, particularly in the areas of cost-effectiveness, conflicts of interest and governance structures. These concerns cannot be addressed through incremental changes.

Even if the existing environment were operating effectively, it is argued that there is a need for higher standards in the contemplated compulsory DC system. As contributions are mandatory, it is a fundamental requirement of that system that it is safe, cost-effective and structured in a way that it meets the needs of the beneficiaries of the system, the South African saver, without being so harsh as to render participation by providers inappropriately challenging.

Four fundamental risks of retirement income social security systems must be addressed in the design and regulation of such systems (Gill et al. 2003):

- **Investment risk** arises from fluctuations to account balances and portfolio values. In a defined contribution system, this risk is borne by the individual.
- **Longevity risk** refers to the uncertainty of the period from retirement to death. This risk may be outsourced to an annuity provider, but is often shared by the retiree through product design or through opting out of purchasing an annuity.
- **Policy risk** is the possibility of intervention by policymakers in the operation of the system, for example, through setting constraints on investment rules that are not in the best interests of all participants, or through failing to safeguard the interests of participants against the impact of potential future changes.
- **Agency risk** arises from the involvement of the private sector in the pension system, and manifests in various ways: misappropriation of assets, conflicts of interest and negligence or ignorance by the provider or advising intermediary.

Any system, with its regulatory framework, must be assessed by considering the extent to which it protects its participants against the impacts of these risks.

The objective of this report is to define the environment within which providers in the mandatory DC system must operate. It draws on local and international research and regulatory material, with specific input from countries as diverse as Sweden, Argentina and India.

The report, supported by discussion of special topics in the appendices,

- recommends a revised **regulatory framework and governance structure** for this market (sections 2 and 3),
- sets out **proposed standards for the products** and customer service requirements for accredited providers (section 4), and
- discusses options concerning the **investment** of the underlying assets (section 5).

The framework and standards apply just as much to the public-sector 'default' vehicle as they do to privately owned 'opt-out' alternatives.

2. Regulation and Supervision

The regulatory framework under which a financial services system is established has considerable impact on the way in which it operates in practice. South Africa already has a regulatory system for retirement saving products. The Financial Services Board (FSB) supervises all providers of such products, focusing on prudential management, and also regulates the advice that intermediaries give in the process of selling these products. South Africa does not directly regulate the products sold by South Africa's insurers.

Some may suggest that regulation is weak in this country, citing evidence of

- very high charges (Rusconi, 2004), particularly on individual retirement products;
- poor product disclosure on the same products, as evidenced by a raft of rulings against providers of such products by the Pension Funds Adjudicator;
- conflicts of interest and questionable business practices on the part of high-profile pension fund administrators such as Alexander Forbes;
- serious mismanagement of pension fund money, for example by Fidentia, responsible for managing the assets of the Living Hands widows and orphans trust; and,
- the FSB's recent submission to Parliament disclosing efforts to increase its power and effectiveness.

While some of this criticism may be valid, at least to an extent, the purpose of this section is not to criticize the existing regulatory framework, which has been designed for the trust-based system in existence today. The primary objective of this section is to demonstrate that a different approach is required for regulating the providers of products and services to the mandatory DC sector, which has a number of characteristics distinguishing it from today's trust-based environment:

- **Compulsion**. Since participation is mandatory, the policymaker has a greater responsibility to ensure that the environment is safe and efficient.
- **Standardization.** Products in this environment will be simpler and easier to compare, but will have to meet certain standards. Ensuring product standards requires a different approach to regulation than the current focus on prudential and advice supervision.
- **Scale.** The supply side of this market will be unlike anything currently in existence in South Africa. Product standards will be tight and the number of providers few. Each of the providers is likely to have the benefit of significant economies of scale, reducing the impacts of regulatory overheads. The regulatory authority, on the other hand, will have the luxury of focusing attention on just a few supply-side entities, making it possible for it to undertake scrutiny of the activities of these providers at a level appropriate to provide the security required of the system. This requires a different approach to regulation, however – one that is more proactive and less reactive.

The regulatory approach proposed by this report is new for South Africa, but it is not without precedent in a large number of countries around the world. Through research into academic papers and correspondence with the supervisory authorities in a few of these countries, the author aims to demonstrate that there is a better way to supervise a mandatory individual account system than is currently available through existing supervisory structures.

2.1 Types of regulation

Three types of regulation may be contemplated for the proposed environment of mandatory contributions.

- **Prudential regulation** focuses on safeguarding the financial strength of the regulated entities. This has been the focal area of the FSB for much of its existence.
- **Regulation of advice** looks to ensure that the information given by providers and intermediaries to product purchasers meets appropriate standards of quality and independence. This has recently been introduced through the promulgation of the Financial Advisory and Intermediary Services (FAIS) Act, 2002.
- **Product regulation** takes these further, putting constraints on the design and possibly pricing of the products in the market.

Comments by South Africa's National Treasury signal concern that the emphasis on prudential regulation has contributed to a sequence of undesirable outcomes, notably providing poor value for money to customers exiting long-term saving products prematurely, without adequately alerting them to the consequences of early termination.

> … these [generally poor] early termination values are to some extent the outcome of the regulatory environment in which retirement annuity funds operate. A Financial Services Board (FSB) study has shown that the values provided on early termination, both in terms of policy surrenders and conversion to paid-up, are in line with the prudential requirements of governing statutes. (National Treasury 2006: 13)

While the existence of prudential regulation is not in itself a problem, greater balance across other areas of regulation is required for the accredited environment contemplated in this report. Poor disclosure, for example, has significantly contributed to the insensitivity of consumers to existing business practice that is not always in their interest.

2.2 Concluding comments

Whilst regulation has traditionally focused on the prudential soundness of insurers, there is an increasing need for regulation that focuses more directly on issues of consumer protection, including the conduct of providers and intermediaries as well as the features of the products they sell.

We are quite clearly in an environment of change. The policymaker and regulator have recognized the need for change and are implementing modifications to existing structures that serve to strengthen the extent to which they lead to increased levels of consumer protection.

It is argued here that such changes do not go far enough in providing this protection in an environment underpinned by mandatory contributions. The conduct of providers and intermediaries and the features of the products that they sell most certainly fall within the scope of the regulatory framework proposed by this document.

3. Governance principles

Governance is the framework of the retirement system that imposes checks and balances on the roles played by all parties to a retirement arrangement and provides security of the accumulated savings and the benefits in a retirement fund.

Governance should be considered at two levels. The foundation of a good system is the set of principles describing the fundamental characteristics of the system, such as

- who bears responsibility for the security of retirement savings,
- what the obligations of these parties are, and
- how they ought to relate to other parties to the fund such as service providers and the regulator and, most importantly, the current members and the beneficiaries.

The following principles are proposed as crucial to the effective operation of the system of accredited providers. The legal entities into which member contributions are deposited are *mutual pension funds* (MPFs), owned by their members, and managed by *accredited retirement institutions* (ARIs), to distinguish them from existing pension, provident and preservation funds. As in today's collective investments environment, the ARI is a management company mandated by the owners of the fund to manage its assets on a contracted set of terms and fees.

The recommendations set out below apply to the ARIs, which are themselves legally separated from any shareholding corporate entities like today's life insurers or asset managers.

- **Trustees.** Every ARI is subject to the oversight of a Board of Trustees, subject to the provisions of South Africa's trust law. The members of the Board must exercise due care in carrying out their duties to members, beneficiaries and the regulator.
- **Written objectives and identification of responsibilities.** The Board must identify and document the governance objectives of the ARI and it must identify and assign operational and oversight responsibility to each of its members and all of its service providers. Both of these – and any changes to these – should be communicated to members, beneficiaries, employers, the regulator and to any bargaining agents that have an interest in the fund. The governance framework must be reviewed from time to time, no less frequently than once every three years. The governance objectives must be supported by a code of minimum suitability standards and a proposal covering succession planning and the selection and appointment of new members.
- **Reporting.** Reporting channels between all parties involved in the administration of the ARI must be established and documented to ensure effective transmission of information and smooth administration of the ARI.
- **Skills, auditing and actuarial services.** The Board must, collectively, have the skills required to carry out its responsibilities with confidence. It must identify and obtain the services of suitable external advisers to provide advice in those areas in which the Board does not have sufficient skill. External auditors, with whistle-blowing responsibilities, must be appointed to provide an assessment of the finances of the fund. An actuary, also with whistle-blowing responsibilities, should be appointed if regarded by the Board as appropriate to the needs of the fund and mitigation of its risks.
- **Code of conduct and conflict of interest.** The Board must establish a code of conduct and an approach to the identification and management of conflicts of interest. This must be written and be made available to the parties in item 2, on request. Active monitoring of adherence to the code and monitoring of potential conflicts must be demonstrated by the Board.
- **Transparency and accountability.** The Board must establish and document a plan for communication of all relevant aspects of the ARI to its members, beneficiaries and the regulator and other relevant parties. This must comply with the set of disclosure requirements set out in regulation and should exceed this where the Board has any doubt concerning whether these requirements are sufficient to meet its fiduciary responsibility to any party with an interest in the success of the ARI. The Board should be legally liable for its actions, as should each of its members.
- **Performance measures.** The Board must establish a code of performance standards for itself and all service providers and advisers to the ARI and carry out a formal assessment of the extent to which these performance standards are achieved at least once a year. The code must include provision for redress in the event of failure to meet the required standards.
- **Risk management.** The Board must assess and document the risks to which the ARI and its members and beneficiaries are exposed and establish a set of actions to provide appropriate levels of protection against these risks. The risk-management plan and the extent to which mitigation is in place must be reassessed every year.
- **Access to information.** The Board must ensure that it has, at all times, clear and timely access to any information required in the execution of its duties and that its advisers have similar standards of access, according to their needs. All information should be provided directly from the originating source.
- **Oversight and compliance.** Appropriate mechanisms to oversee and ensure compliance with the legislative requirements governing ARIs must be established and documented.
- **Custodian.** Custody of ARI assets must be carried out by an independent custodian, who must keep separate the ARI

assets from its own, may not entrust the assets to a third party and is required to take on whistle-blowing responsibilities.

- **Redress.** Pension plan members and beneficiaries must be granted appropriate levels of access to statutory redress mechanisms. The existence and operation of these mechanisms must be included in communications to members at least once a year.

4. Recommendations

South African policymakers are considering the introduction of a system of mandatory saving for retirement in individual accounts. Under the proposals, contributions are to default to a public-sector entity, but participants may opt out of the default provider, redirecting contributions to an accredited private-sector alternative. This report considers the conditions that ought to be placed on firms applying for registration as accredited retirement institutions for the right to provide savings vehicles or risk products to these savers.

This research has been commissioned by the Department of Social Development, and has its recommended framework in mind, which includes a comprehensive contributory social security system. The concepts and recommendations of this report nevertheless apply to any mandatory individual account scenario with some form of private-sector management.

This is expected to be a substantial financial system backed by mandatory contributions. It is imperative that the marketplace promotes appropriate competition between providers and low cost to participants, establishing confidence among South Africans that their interests are properly safeguarded.

Two key features of the market run through all aspects of system design and regulation:

- **Simplicity and standardization.** Products are simply designed, providing benefits that are clearly understood by participants, and they are easy to compare.
- **Consistency across providers.** Accredited retirement institutions (ARIs) compete with one another on an equal footing. The conditions for provider participation are applied with consistency across all private-sector entities and their public-sector competitor.

4.1 Legal framework

The proposed broad legal framework is analogous to today's collective investments environment.

- Participants selecting a provider become members of a **Mutual Pension Fund (MPF)**, each of which contracts an ARI to supply standardized services.
- **Governance principles** underlying the structure of ARIs are designed to maximize participant protection but do not limit inappropriately the types of organizations that may consider registering as ARIs. The trust-based framework is regarded as the most appropriate foundation to governance structures. Both non-profit and profit-seeking entities should be encouraged to apply.
- **Governance in practice.** ARIs are encouraged to treat governance standards as establishing merely a minimum, finding ways to compete on the basis of the soundness of their practical implementation of good governance structures.

4.2 Regulatory framework

The approach proposed for regulation and supervision of this market differs considerably from the corresponding approach used in pension provision today.

- **Proactive supervisory philosophy.** The supervisor proactively and continually monitors the ARIs – which will exist in relatively low numbers – to ensure that they are compliant and financially secure.
- **Comprehensive supervision.** Prudential regulation is supported by thorough regulation of advice and product.
- **Regulatory independence.** The supervisor raises finance from ARIs and is financially and politically independent of government. Structures are established to safeguard members of the executive of the supervisor and its advisory panel from political influence, while retaining the appropriate accountability to the relevant minister.
- **Existing regulatory structures** continue to work as at present, subject to the review processes provided for under current law. A distinct philosophy requires a distinct operation. The entity responsible for registering and supervising ARIs may form a department of the FSB or a separately established organization, as appropriate, with structures in place for mutual support and information sharing and the possibility of future merger of operations.
- **Advice** continues to be regulated under the existing framework, but modification to match the needs of participants is considered as part of an ongoing process of assessment.
- **Participant contributions** are collected centrally but the responsibility for managing accounts and processing benefit payments lies with the ARIs. Alternatives to this model must be considered.
- **Communication** to participants and the public at large forms an important part of the responsibility of the supervisor. This communication includes product and price comparison.

4.3 Product framework

A major development for the South African financial services environment is the specification of minimum product standards. In the interests of participant security and product simplification, standards are proposed in a number of areas.

- **Contributions and accumulated saving** must be placed with a single ARI.
- **Individuals**, not employers, have the right to exercise the choice of ARI.
- **Death and disability benefits** are partially provided from within the defined contribution (DC) system and participants may seek death and disability cover from ARIs, which must offer both savings and risk cover products. Whether ARIs are permitted to outsource the provision of death and disability benefits requires further consideration.
- **Annuities** are provided by insurance companies, not ARIs. Participants must exercise a choice of annuity provider at retirement to avoid defaulting to the existing ARI, if it also offers annuities. Some state provision of annuities, up to a minimum level, is contemplated, and some standardization of annuity products is encouraged, to facilitate product comparison
- **Administration charges** are reduced through structural interventions such as centralized contribution collection. Furthermore, limits to the available types of charges are considered crucial and limits to the level of charges require strong consideration, in the interests of participants. A long-term target for such a charge limit is an all-inclusive annual management charge of 0.60% of assets, or its equivalent contribution-based charge, approximately 10%.
- **Commission scales** are not regarded necessary under the assumption that administration charges are capped.
- **Disclosure and service standards** are set and monitored by the supervisory authority.

4.4 Investment framework

The proliferation of investment alternatives is not in the interest of participants, particularly in a mandatory saving environment, because it increases system costs without necessarily providing concomitant benefits. It is recommended that investment flexibility is limited in a number of ways.

- **Prudential limitation of investment classes** is implemented to safeguard the interests of participants, mainly by reducing the impacts of conflicts of interest and concentration of risk.
- **Minimum investment returns** are not required of ARIs.
- **Investment choice** is mandated, but strictly controlled. ARIs are required to make five portfolios available to participants, each meeting asset-allocation requirements to provide reasonably predictable and uniform risk-return characteristics.

4.5 Market description

How does this environment differ from what South Africa has at present?

The present range of providers will continue to service customers saving voluntarily, but the market for mandatory contributions, under the recommendations in this report, would change significantly.

A limited set of providers, each probably developing significant scale, would sell straightforward, easily comparable products at low cost and low profit margins. They would compete on the basis of price and investment performance and would demonstrate the value that they bring to participants in unambiguous terms. The financial security of participants would be protected by a strong proactive supervisory process.

4.6 Concluding comments

Significant further input is required, from a wide range of stakeholders, in order to understand the consequences of these recommendations and their implications. It is hoped that this report will give impetus to this process of discussion.

Part Four:

Framework for Post-Retirement Protection in Respect of Medical Scheme Contributions

This report was commissioned by the Department of Social Development to promote discussion on the issue of the protection of post-retirement medical scheme contributions. The report seeks to provide linkages to the proposed framework for healthcare reform. The essence of the problem of healthcare cover for those in retirement is that healthcare costs rise at exactly the time that income reduces. This results in an affordability 'crunch' for those in retirement.

The Taylor Committee recommended in 2002 that the key reform for both retirement and healthcare should be the development of a mandatory contributory system for those who can afford to contribute. The report outlined four phases of reform leading through Social Health Insurance to the ultimate goal of a National Health Insurance system. The existing not-for-profit medical schemes would be transformed as the vehicles for the pooling of funds and purchasing of care for their members under a mandatory Social Health system.

The reforms of healthcare since 1994 of open enrolment and community rating have already had a large impact on reducing the cost of healthcare for the elderly. There are three further reforms needed to achieve a system of Social Health Insurance. These are the introduction of risk-adjusted cross-subsidies, income-based cross-subsidies and the creation of a mandatory environment where all people earning above a certain amount would be required to contribute to healthcare. Social Health Insurance (SHI) would cover the cost of Prescribed Minimum Benefits (PMBs) in medical schemes and members would only need to contribute directly for administration costs and for any voluntary benefits above the minimum package.

The current price of PMBs in a voluntary environment is shown to be substantially higher than it would be under mandatory membership. If SHI covers all people in households where someone is earning above the tax threshold, then the price of PMBs falls from R217.99 to R203.08 pbpm (93.2% of voluntary market level). If SHI were to extend to the households of people earning over R1,000 pm then the price of PMBs could be R170.68 pm or 78.3% of the voluntary levels.

There have been major changes in employer subsidy policy with respect to subsidizing healthcare in retirement in South Africa, spurred in particular by changes in international accounting treatment of these promises. It is estimated that the percentage of companies not offering healthcare subsidies in retirement to new employees was probably between 85% and 95% in 2005. Some existing pensioners have been offered additional pension in exchange for relinquishing any future medical scheme subsidy but there are concerns that this may have been a misuse of pension fund surplus.

Employers have been remarkably successful at reducing the risk of healthcare inflation to themselves and ensuring that workers and pensioners carry that risk. This was accomplished with almost no response from unions, who in many cases welcomed the move from defined benefit to defined contribution retirement schemes that accompanied this change in employment conditions. The full effect of transferring investment risk and medical inflation risk to the elderly and future retirees will take some years to unfold and the loss of subsidy has been described as 'a future time bomb'.

An employer can guide a restricted medical scheme to create income cross-subsidies within the medical scheme itself. This 'social engineering' of contributions is usually deliberate and agreed by all groups covered by the scheme. However, since the 1990s the trend has been away from company-based schemes to open medical schemes. Even with public-sector workers returning to a restricted scheme under GEMS, there are still substantial numbers of people in open medical schemes where it is difficult to create deliberate income cross-subsidies.

The potential contributors to mandatory Social Security are identified under three different scenarios using the General Household Survey 2005:

- **Scenario 1:** Exclude 'Foreign', 'Household', Domestic and Farm Workers. Contribute if earning between ages 20 and 64. Contribute 15% of income, but only for income above the tax threshold. This has 4.8 million contributors and annual contributions of R34.5 billion.
- **Scenario 2:** As above, but contribute if earning above R2,000 per month. This has 6.0 million contributors and annual contributions of R42.8 billion.
- **Scenario 3:** As above, but contribute if earning above R1,000 per month. This has 8.0 million contributors and annual contributions of R54.9 billion.

The demographics and potential medical scheme coverage of people over age 65 are also identified. The One-Year Model is used initially to set the contribution rate and to investigate the impact of those under age 65 covering the cost in full for those over age 65.

It was found that the social security contribution needed to cover the full REF price of PMBs for contributors and everyone in their households under age 65 would be 3.0% for Scenario 1 (earning above the tax threshold), rising to 3.3% of income for Scenario 2 (earning above R2,000 pm) and 3.8% of income for Scenario 3 (earning above R1,000 per month). The cost across all scenarios to provide a post-retirement subsidy for all potential medical scheme members over age 65 was found to add only 0.1% to the social security contribution for healthcare. This gives a total social security contribution of 3.1% for Scenario 1, 3.4% for Scenario 2 and 3.9% for Scenario 3. The cost of a wage subsidy to cover social security contributions for those earning under the tax threshold is also determined.

The following principles are proposed for the post-retirement subsidy for medical scheme membership once mandatory Social Security for health becomes operational:

- Prescribed Minimum Benefits are the common package that all medical schemes must provide – hence this element, as defined from time to time, should be collectively funded.
- For people over age 65, the balance of the cost of PMBs, after the per capita subsidy, should be funded from the social security contributions of those still working.
- There should be no pre-funding of this amount and it should form part of the pay-as-you-go funding of the social security system.
- Entitlement to the post-retirement subsidy is determined individually for each person according to the number of years of medical scheme membership.
- As far as possible, it is preferable to engineer an entitlement to PMBs in full after age 65 rather than to a proportion of PMBs based on years of membership.
- Minimum membership for entitlement might be set at a nominal ten years of membership after the year 2000, which is when historical records of membership were first required by legislation.
- Testing of the cost of benefits should be done using an entitlement to the balance of PMBs in full rather than an amount linked to years of medical scheme membership or years of contribution to Social Security.
- Packages above PMBs are voluntary choice and thus should be individually funded alongside other voluntary-retirement needs.
- When PMBs are extended the need for voluntary funding will become smaller but there is insufficient detail available at this time to quantify the impact of revised PMBs or any cost-sharing with members.

The key institutional component to enable Social Security for health under a Social Health Insurance (SHI) system is the Risk Equalization Fund (REF). The institutional framework for any funding of post-retirement medical scheme contributions requires linkages with SHI and the Risk Equalization Fund, as well as with the central retirement fund. The cashflows for the mandatory post-retirement benefit and any additional voluntary contributions are shown diagrammatically. The suggested administrative outline for SHI seems to be able to deal with the post-retirement subsidies fairly readily.

The greatest risk in funding for post-retirement medical scheme contributions is that the cost of healthcare will continue to out-strip inflation. Future changes in the number of pensioners over a 75-year period are not a significant risk to the social security system compared to the risk of high healthcare inflation. The definition of the future minimum benefit package needs clarity as this could significantly change the funding requirement.

Further work remains to be done on the definitions of contributors to Social Security and on the definition of ‘family’ and entitlement for the envisaged benefits. Clarity is needed on the pace of healthcare reform and the sequencing of retirement reform and healthcare reform.

The most effective means of pre-funding for post-retirement medical scheme contributions for those over age 65 is to proceed as fast as possible to full implementation of Social Health Insurance. The additional cost for funding in full for the balance of PMBs for those over age 65 is shown to be 0.1% of contributions under all three scenarios.

It is important that decisions taken by government in this regard are clearly and rapidly communicated.

Introduction

Introduction

The reform of pension or retirement systems features prominently amongst the most important issues about which contemporary society is preoccupied. Whereas a reform process of this kind may only represent either a political, economic or demographic change in many jurisdictions of the world, the South Africa case suggests that such a reform forms part of the total socio-economic transformation of our society. Accordingly, the current generation, of which we are part, is presented with a rare opportunity to partake in a moment of history; arguably one of the biggest fundamental reforms South Africa has seen since 1994.

Invariably, the existing varying pension systems which are to be found in different countries of the world reflect the historical choices made by these countries at various stages of the development of their societies. Be that as it may, there exists a considerable body of expert opinion which has pointedly observed that there is generally insignificant difference between the varieties of pay-as-you-go systems obtaining around the world today; be they flat rate, earnings related or based on cumulative contributions. However, the process by which we arrive at the design of our new system is a matter of considerable significance.

While history reflects that many governments of the world had adopted unilateral approaches to making choices about their systems, South Africa has cultivated a rich tradition of public consultation, which eliminates the risk or the desirability of unilateral government action on a matter as important as pension reform. Government remains committed to an inclusive process of public consultation and debate.

I take the opportunity to acknowledge the team of highly professional people we have commissioned to undertake the second phase of the research. The feasibility studies are meant to inform the key retirement reform recommendations we made at the end of June 2006. Mr Selwyn Jehoma, the Deputy Director-General for Comprehensive Social Security ensured that the work was undertaken. Mr Alex van den Heever led and coordinated the research. Mr Bheki Makhuzeni provided legal support. Prof. Heather McLeod is our expert in the aspects relating to post retirement medical contributions. Mr Rob Rusconi undertook the actuarial modelling of benefit design options and developed the accreditation framework for pension funds. Dr. Michael Samson continues to do sterling work on social transfers. In this instance, Dr Samson assesses the options of the removal of the means test to old age pension. Prof. Charlotte Du Toit subjected the work to macro-economic and computable general equilibrium modelling to assess various implications as they relate to fiscal matters, taxation, the proposed wage subsidy, etc.

As part of our overall work on pension reform, the set of feasibility studies contained herein concentrate purely on the technical aspects. Accordingly, such work will be recorded in research documents, journals and the media. The decision making aspects could largely be in the shadows, despite the fact that they will constitute the most important factor in the implementation of the reforms. I wish to exhort all to ensure that public engagement is not moved to the periphery. This was our point of departure in the first discussion document. The last six months have shown that there is a heightened interest amongst stakeholders with vested interest. However, we need to broaden participation from South Africans from all walks of life.

Vusi Madonsela

Director General: Department of Social Development

5 September 2007

Part 1

An Options Assessment with Respect to Making the State Old Age Pension Universal

by Prof. Michael Samson

Part 1

CONTENTS

TABLES

FIGURES

1. Introduction

A universal State Old Age Pension (SOAP) can ensure that all South Africans, irrespective of earnings or occupation, can access a level of income in old age that is sufficient to protect them from poverty. This basic pillar of a pension system can effectively cover the entire population of older people.

Against the background of international experience, this report assesses some of the key issues associated with eliminating the current means test for the social pension, effectively making the grant universal. The report also examines some of the issues pertaining to a differentiated benefit level, and the potential synergies offered by integrating a universal pension into a comprehensive social security system. In addition, this study employs micro-simulation analysis and lessons from South Africa's experience to illuminate these issues.

Sections 2 through 6 address the first item in the Terms of Reference: "An options assessment with respect to making the SOAP universal with a recommended favoured option." These sections discuss the rationale for a universal social pension within the context of a multi-pillar system, examine international experience and discuss some of the key options. The sections also examine the size of the grant in terms of its ability to replace workers' incomes in retirement and efficiently tackle poverty. Section 6 analyzes the efficiency of alternative options.

Section 7 addresses the second item in the Terms of Reference: "An assessment of the potential operational synergies linked to the broader reform of retirement." This section briefly discusses legislative, administrative, governance, fiscal and income support synergies.

Section 8 provides a quantitative assessment of the financial implications of a universal social pension. Section 9 includes an evaluation of a 'tax clawback' approach to targeting and discusses the appropriate tax treatment of the universal social pension. Section 10 summarizes the key recommendations.

2. The Rationale for a Universal Pension

Old age pensions can be implemented in different ways depending on the objectives of policymakers. For many countries undertaking pension reform or implementing a pension for the first time, addressing old age poverty is a key policy objective. Old age poverty can be tackled through a universal pension or a means-tested pension. A universal pension has several identifiable benefits. These include:[1]

- It is simple to understand.
- It is inexpensive to run.
- It can reduce or eliminate old age poverty.
- It promotes equity.
- Future costs to the state are more certain.

Empirical studies have documented that older people often face a higher incidence of poverty than do other age groups.[2] Older people often have more limited opportunities to generate labour income; they are more likely to face chronic illnesses and labour market discrimination and are unable to rely fully on traditional safety nets that are under pressure from rapid socio-economic change.

In 1994 the World Bank published Averting the Old-Age Crisis with a proposal for a three-pillar framework consisting of a public pillar, a second mandatory pillar and a third pillar made up of occupational or personal saving plans. According to the World Bank:

The public pillar would have the limited object of alleviating old age poverty and co-insuring against a multitude of risks. Backed by the government's power of taxation, this pillar has the unique ability to pay benefits to people growing old shortly after the plan is introduced, to redistribute income toward the poor, and to co-insure against long spells of low investment returns, recession, inflation, and private market failures. (World Bank 1994: 17–18)

The World Bank adds that the public pillar "should be modest in size, to allow ample room for other pillars, and pay-as-go to avoid the problems frequently associated with public management of national provident funds" (World Bank 1994: 17–18).

The World Bank summarizes the three pillars in the following way:

- A basic pension (mandatory publicly managed pillar)
- Contributions to an earnings-related pension (mandatory privately managed pillar)
- Voluntary saving

Referring to the first pillar as mandatory is contradictory if it is to be non-contributory and financed from general taxation. Although this pillar was meant to address poverty, it excluded the non-working poor to a large extent, emphasizing participation based on work. According to the World Bank the first pillar could be implemented in three alternative ways. First, it could be part of a means-tested programme for the poor of all ages, where eligibility criteria take into account the diminished ability of the old to work. Second, it could offer a minimum pension guarantee to a mandatory saving pillar. Third, it could provide a universal or employment-related flat benefit that co-insures a broader group.

The idea of being non-contributory and meeting the needs of the poor never came across clearly in the World Bank framework. To add to the confusion, World Bank staff came to define the first pillar as any public pension, including earnings-related pensions, drastically reducing its relevance as an anti-poverty tool.[3]

The importance of these pillars differs across countries, depending on whether the primary concern is absolute poverty or relative poverty. The first pillar is public, financed by government on a Pay-As-You-Go (PAYG) basis. In practice, budgetary considerations often cause governments to exclude from the benefits of pillar 1 those who do not contribute to pillar 2. These are predominantly workers with low lifetime earnings,

[1] O'Connell (2004)
[2] See for example Kakwani and Subbarao (2005)
[3] Willmore (2006)

such as domestic workers, caregivers, agricultural labourers and workers in the informal sector.[4]

More recently, the World Bank has proposed a five-pillar framework.[5] One of the key changes to the Bank's perspective is the emphasis on a basic income provision for all vulnerable older people. This is summarized in the following words:

> Experience with low income countries has brought into focus the need for a basic or zero (or non-contributory) pillar that is distinguished from the first pillar in order to extend old age security to all elderly. (World Bank 2004: 6)

The proposed five-pillar system includes:

- A non-contributory zero pillar for poverty alleviation;
- A first pillar earnings-related contributory system ;
- A mandatory second pillar with individual accounts;
- A voluntary third pillar; and
- Informal intra-family support of various kinds, including healthcare.

The zero pillar protects older people from absolute poverty – defined as consumption below a minimum level such as the poverty line. A SOAP, whether universal or means-tested, can be categorized as a zero pillar. The other pillars protect older people from relative poverty – defined inter-temporally in this case as a decline in a worker's usual level of consumption during his or her period of employment.[6]

The Department of Social Development (DSD) has a stated objective of "protecting income to prevent poverty where savings will prove inadequate".[7] Where poverty rates are high, as is the case in South Africa, and contributory schemes have limited coverage, an effective way to ensure that all older people do not face poverty in their old age is to provide a universal SOAP.

The argument for means-testing is based on the supposed reduction of the fiscal cost of pensions by targeting the poorest.

However, a universal system may be superior to means-testing for a number of reasons. First, means tests increase administrative costs associated with the repeated verification of income and assets to decide whether older people should receive the benefit. Given that poverty is dynamic – people move in and out of poverty – targeting can become very costly, and the targeting criteria will require regular evaluation. Second, the tests promote perverse incentives. People have an incentive to remain poor if receiving a benefit is based on a defined income threshold. A means test can also discourage low-income workers from saving for old age. Third, means-tested benefits can be viewed pejoratively as hand-outs, which may lead to the stigmatization of beneficiaries and pose risks of eroding political support.

2.1 Summary

A universal SOAP is easy to understand and promotes equity. These are critical characteristics in addressing the legacy of exclusion and inequality found in South Africa.

The idea of a zero pillar is important for addressing absolute old age poverty. Additional pillars – whether two or more – are necessary for alleviating relative poverty in an inter-temporal sense – in order to smooth lifetime consumption.

A universal SOAP does not have the high administrative costs, social costs and adverse incentives associated with means-testing.

3. International Comparisons

South Africa was the first country in Africa to introduce a social pension in line with the Old Age Pensions Act of 1928. The South African social protection system has evolved from one that was geared to cater for a minority to one that now broadly covers the entire population, providing increasingly effective support to the poorest and most vulnerable. Key statistics regarding South Africa's means-tested SOAP are detailed in Table 1:

Table 1: The South African Social Pension, 2007

Eligibility	Number of Beneficiaries	Beneficiaries (% of eligible population)	Monthly pension (US$)	Pension % of GDP per capital	Annual Transfer (% of GDP)
Citizens and permanent residents from age 60 for females and 65 for males.	2,205,105	90%	$130	31.5%	1.4%

Source: Department of Social Development.

[4] St John and Willmore (2000)
[5] World Bank (2004)
[6] Willmore (2004a)
[7] Department of Social Development (2006a)

Despite the potential impact that a universal SOAP can have on addressing poverty, very few countries have implemented such schemes. There are 10 countries in the world representing different regions and income levels with universal pensions listed in Table 2 below. These are Antigua, Bolivia, Botswana, Brunei, Lesotho, Mauritius, Namibia, Nepal, New Zealand and Samoa.[9] Some key attributes of these pension schemes are presented in Table 2. Notably, New Zealand is the only high-income country identified with a universal SOAP.

Table 2: International Comparison of Universal State Old Age Pensions, 2005

Country	Eligibility	Number of Beneficiaries	Beneficiaries (% of eligible population)	Monthly pension (US$)	Pension % of GDP per capita	Annual Transfer (% of GDP)
Antigua	Citizens from age 60	4,170	100	$281	30.9	1.8
Bolivia	Citizens from age 65	366,000	100	$19	22.6	1.3
Botswana	Citizens from age 65	71,000	167	$38	8.8	2.8
Lesotho	Citizens from age 70	75,000	107	$25	40.5	1.4
Mauritius	Citizens and permanent residents from age 60	112,000	109	$84	19.2	2.0
Namibia	Citizens and permanent residents from age 60	82,000	85	$62	24.9	0.7
Nepal	Citizens from age 75	171,322	60	$2	8.9	0.1
New Zealand	Citizens and permanent residents from age 65	453,400	100	$631	38.7	4.1

Sources: Social Security Programmes throughout the World (2005), Willmore (2004a) and Institute of Southern African Studies – National University of Lesotho (2006). Pension as a % of GDP per capita calculated using GDP data from the World Development Indicators Database of the World Bank. (Note: The data for New Zealand is for 2004.)

3.1 Eligibility

The age criteria for the means-tested SOAP in South Africa are similar to those found in most of the eight countries with a universal SOAP listed in Table 1. Only two countries – Lesotho and Nepal – have a significantly higher age requirement. These countries are the two poorest in the world to provide a universal social pension – although the higher age requirement reduces the fiscal cost of providing this benefit.

Three countries – Mauritius, Namibia and New Zealand – provide the benefit to permanent residents in addition to citizens. Restricting coverage to citizens generates some fiscal savings. Providing the social pension to both citizens and permanent residents, however, is consistent with broader economic policies aimed at encouraging skills acquisition (through immigration), is less prone to constitutional challenges and is in line with eligibility criteria for other South African social grants.

3.2 Coverage of Eligible Population

With the exception of Nepal, all countries have fairly high coverage of the eligible population. A well-administered pension should have coverage very close to 100%, taking into account measurement errors. However, three countries – Botswana, Lesotho and Mauritius – have coverage that significantly exceeds 100%. This could be a result of people below the eligibility age receiving the pension. It is also possible for the relatives of deceased pensioners to fraudulently collect benefits, increasing inclusion errors.

The South African SOAP reaches over 2 million beneficiaries, representing approximately 90% of the target population. By international standards this is excellent coverage for a means-tested pension. The administrative complexities of means-testing significantly exacerbate the problems of inclusion and exclusion errors. For example, means-tested pensions in Costa Rica and India cover only 20% and 4% of the targeted population respectively.[10]

[9] Brunei and Samoa are excluded from the analysis owing to a lack of information
[10] Willmore (2004a)

The high coverage in South Africa suggests that the required administrative machinery for effective delivery has been carefully developed. If a means-tested pension can be delivered with such widespread coverage, then it is likely that a less administratively demanding universal benefit can be delivered with equal or better coverage, and more cost-effectively.

Based on current population estimates, making the South African SOAP universal would increase coverage by about 1 million people to over 3 million people (including those already eligible but not receiving it).[11] This is more than twice the number of people covered by universal pensions in the eight countries in Table 1 combined.

3.3 The Size of the Benefit

The level of the universal pension is closely correlated with the level of GDP per capita. Poorer countries tend to provide smaller benefits than richer countries. However, two poor countries – Nepal and Lesotho – with very similar levels of human development and per capita income nevertheless provide benefits that differ by a magnitude of more than ten. This demonstrates that choosing the benefit level is not only an economic decision but also a political one. The more political support a universal pension has, the greater the benefit is likely to be.

In 2005, GDP per capita in South Africa, Botswana and Mauritius was R28,718 (US$4,960), R29,992 (US$5,180) and R30,455 (US$5,260) respectively. Relative to these comparable countries the South African means-tested SOAP provides generous benefits. Only Antigua and New Zealand, which have GDP per capita that is twice and six times that of South Africa respectively, have higher benefits. These substantial benefits are critical to the poverty-reducing effects that these grants produce in South Africa.

The pensions range from 8.8% of GDP per capita in Botswana to 40.5% of GDP per capita in Lesotho. There is no correlation between the pension's share of GDP per capita and the level of development of the country. In fact, one of the poorest countries – Lesotho – has the largest pension expressed as a share of per capita GDP. With a benefit equivalent to 31.5% of GDP per capita, the South African pension compares favourably with these countries. It is also important to note that, given the high incidence of poverty and income inequality in South Africa, the pension significantly exceeds the average income of poor households. For the median households receiving grants in South Africa on the basis of pre-transfer income, the grant is the only source of household income. Without grants, 75% of grant-receiving households have a monthly per capita income of R40 or less.[12]

3.4 Cost Issues

One of the key questions is whether it will be affordable to allow benefits to be maintained at the current level if a universal SOAP is introduced. It is reasonable to expect that the savings from the administrative costs associated with abolishing the means test will offset some of the costs of increasing coverage to all older people.

The South African SOAP currently absorbs about 1.4% of annual GDP. This lies in the lower half of the range for the eight universal pensions in Table 1 – 0.1% for Nepal at the lower end and 4.1% for New Zealand as the upper limit.

It has been found that the administrative costs of a universal SOAP in five countries – Bolivia, Botswana, Mauritius, Nepal and New Zealand – are well below 5% of the transfer.[13] This is well within reach of South Africa, where the current administrative cost of the social assistance programme is approximately 6.6% of the transfer.[14] In addition, recovering part of the benefits from high-income individuals through the tax clawback mechanism would lead to a lower net cost.

It is interesting to consider the fiscal implications of increasing the current benefit within the context of a universal SOAP provided to the 3 million eligible South Africans. Increasing the current benefit by 50% – from R870 to R1305 – would imply an annual cost for the universal SOAP equivalent to about 2.7% of GDP. This is slightly below the 2.8% spent in Botswana and 1.4% lower than expenditure in New Zealand. These figures exclude administrative costs, which are expected to be minimal after the means test has been removed. Administrative costs at 5% of the transfer will only cost approximately 0.14% of GDP for a benefit of R1305. The affordability of a significantly higher benefit is to a large extent a result of the rapid and sustained economic growth experienced in South Africa over the last decade.

3.5 Summary

South Africa's eligibility criteria are comparable with those of similar countries that have universal pensions.

Coverage of South Africa's pension is excellent compared to both universal pensions and particularly other means-tested pensions in other countries.

The amount paid by the South African pension is generous by international standards, generating a substantial impact in terms of poverty reduction.

Based on international evidence and a basic assessment of costs, a universal SOAP is affordable for South Africa.

4. The Special Case of New Zealand

New Zealand is unique in that it is the only high-income country in the world with a universal SOAP and that has never had mandated contributory pension schemes. Thus, New Zealand has a two-pillar system – the basic pension and voluntary saving – in contrast to the three-pillar World Bank model. In 1997 a proposal to replace the SOAP with a mandatory, defined contribution scheme was defeated 12 to 1 in a referendum that drew a record 80% of registered voters.[15]

[11] Statistics South Africa (2006a)
[12] de Koker et al. (2006)
[13] Willmore (2006)
[14] Calculated from the Department of Social Development Annual Report (2006b)
[15] Willmore (2004b)

It is worth noting that the two-pillar system in New Zealand is associated with a relatively low level of old age poverty. Approximately 5% of older people in New Zealand live in poverty compared to 20% in the United Kingdom.[i] This distinct difference exists despite the fact that the United Kingdom has a significantly higher GDP per capita than New Zealand. The old age pension in New Zealand is not considered as merely a minimal safety net for the poor. At the same time, however, it is not expected to provide for all the needs of higher-income older people.[17]

4.1 Summary

It is possible to provide adequate income support to older people without a mandatory contributory pension.

A universal SOAP is able to reduce old age poverty even in developed countries.

5. Feasibility of a Differentiated Benefit Level and Replacement Ratios

Currently, the social pension serves two different functions: (1) it provides basic social protection for older people, protecting them from age-related poverty; and (2) it substitutes for an earnings-related pension for those whose employers have failed to deliver workers' entitlements to adequate provision in their old age.

It is difficult for one instrument – the social pension – to meet these two objectives, and this raises the question of a differentiated social pension. An appropriate level for the universal social pension meets the requirements of a basic pillar for social security. An additional benefit for retired workers may provide an administratively feasible substitute for a formal earnings-linked contributory supplemental pillar. In this section the social and economic case for a differentiated social pension benefit level is assessed, as well as the associated operational issues. In carrying out this analysis, an assessment of the role of the social pension in replacing income forgone through retirement for low-income workers is undertaken.

Based on available evidence, none of the eight universal pensions discussed differentiate benefits on the basis of employment. This suggests that South Africa would be the first country to benefit from a SOAP linked to past employment. Only in Mauritius are benefits differentiated, and this is done on the basis of age, with older pensioners receiving higher benefits. Higher benefits can be paid to older people with insignificant fiscal implications, because they constitute a decreasing share of the population.

A work-related non-contributory pension poses important questions regarding its scope – particularly regarding informal-sector and care workers. These questions imply important considerations for the required systems that would monitor compliance with the identified eligible work criteria. A work-related non-contributory pension with a future commencement date for eligible work paired with a once-off increase in the universal pension would be more administratively feasible than an option that depended on measuring past work experience. The future commencement date for tracking work would allow effective systems to be developed, and the once-off increase in the universal pension would provide broad compensation to low-income older people for the historical deprivation of a work-related pension.

According to the 2006 Labour Force Survey, there are approximately 1.3 million South Africans in the formal sector earn R1000 or less per month. Table 3 shows the number of low-income workers in the formal sector, informal sector and domestic worker sector.

Table 3: Low-Income Workers by Sector ('000), 2006

Monthly Income	Formal Sector	Informal Sector	Domestic Sector
R1-R500	285	776	298
R501-R1000	1039	674	381
R1001-R2500	2558	647	188
Total	3882	2097	867

Source: Statistics South Africa (2006b), Labour Force Survey 2006

[16] O'Connell (2004)
[17] St. John and Willmore (2000)

There are about 2.1 million low-income earners in the informal sector and 867,000 in the domestic worker sector. The question arises as to whether these workers should also be entitled to the differentiated benefit. If one is to treat all low-income workers the same, then one might argue that these workers should also receive a differentiated benefit. However, relative to the formal sector it is more difficult to verify whether people work in the informal sector and how long they have worked in the sector.

It is also useful to compare the SOAP with the minimum wage. This gives an indication of the extent to which low-income workers can maintain their pre-retirement level of consumption. Table 4 shows the minimum wage for selected industries.

Table 4: Minimum Wages for Selected Industries, 2007

Sector	Wage (R)
Domestic Worker Sector	R1067
Farm Worker Sector	R1041
Forestry Sector	R 836
Taxi Sector	R1432
Wholesale and Retail Trade Sector	R1197

Source: Department of Labour. (Note: The wage for the taxi sector is that of a driver. For the wholesale and retail sector it is that of a general assistant.)

The current benefit of R870 is a significant share of minimum wages in these sectors – for the forestry sector it exceeds the minimum wage. Minimum wage analysis suggests that low-income earners are likely to have a fairly high replacement rate from the basic level of the social pension.

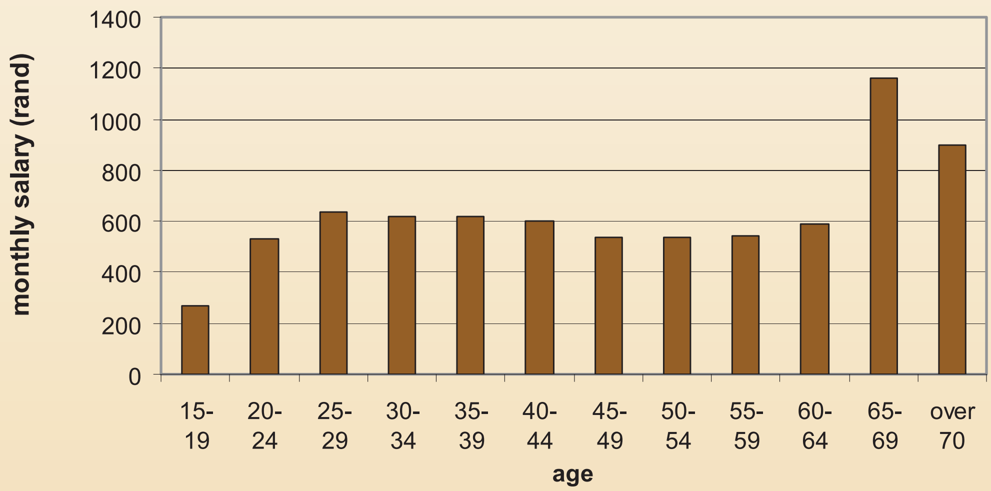
A caveat on comparing the minimum wage with the SOAP is that older people close to retirement might be expected to earn relatively higher incomes based on the rank they would occupy and their years of experience. For example, the minimum wage for a supervisor in the wholesale and retail sector is R2100. While further research is required, it is likely that the current SOAP benefit would have a replacement rate of only between 40% and 50% for many older workers.

Nevertheless, the current benefit levels provide a significant replacement rate for workers not covered by a private pension. Based on the 2004 Labour Force Survey, the average (mean) wage of a worker without access to a private pension was R992 per month, compared to R5126 per month for workers who had access to private pensions. (In both cases the medians are significantly less – R600 for workers without pensions and R2600 for those with pensions.) The monthly benefit level of R740 in 2004 represented an average (mean) replacement ratio of 75% (and 126% based on the median wage). Even for those with access to a private pension, 25% have monthly incomes less than or equal to R1200 per month. For those workers without private pensions, on the other hand, 75% had monthly incomes less than R1000.

While the preceding paragraph is based on the averages across all ages, it is not clear that unskilled workers' wages rise consistently with experience. The graph below maps out average wages for workers without private pensions by age.

Average wages rise rapidly and peak when workers reach their late 20s, then plateau until the mid-40s. They then drop and plateau until retirement age. The paradoxical result of average wages rising when workers reach retirement age is explained by selection bias. The numbers of observations in age categories above age 60 plummet – those people with very attractive jobs tend to remain employed, while those with low-paying jobs tend to quit when the social pension becomes available. As a result, average wages after age 60 are biased upwards.

Figure 1: Monthly salaries by age for those with no private pension



Source: Statistics South Africa Labour Force Survey September 2004

5.1 Summary

The SOAP provides a high replacement rate for low-income earners. It is an adequate safeguard against absolute poverty following retirement for these workers. However, at its current level it would not allow all low-income earners to maintain their pre-retirement level of consumption. In addition, the social pension often serves as a broad-based household grant tackling poverty. A higher grant would provide better replacement income for more workers and would better serve the Department's objective of tackling poverty.

The option of a work-related non-contributory pension would require additional research in order to more completely define its scope, taking into account issues regarding informal sector and care workers. In addition, an option for a work-related non-contributory pension would need to take into account the requirement of appropriate systems for monitoring compliance with the identified eligible work criteria.

6. Evidence from South African Micro-simulation Modelling

The size of the social pension can be assessed in light of alternative uses of fiscal resources. Micro-simulation modelling provides quantitative evidence of the relative poverty-reducing impact, fiscal cost and efficiency of the various policy options. The evidence discussed in this section is based on EPRI's micro-simulation model calibrated with Statistics South Africa's General Household Survey for 2005. The full results are provided in the Technical Report.

The poverty lines for this analysis are based on the updated poverty line recommended by the South African government's Committee of Inquiry for Comprehensive Social Security in their updated Terms of Reference for Micro-simulation Analysis, as well as the recent indication from a Statistics South Africa discussion document. Updating the Committee of Inquiry poverty line based on the Consumer Price Index for the poorest quintile of the population identifies a monthly poverty line per person of R520 for July 2005 – the time of the General Household Survey used in this analysis.

Using the overall Consumer Price Index implies a poverty line of R500 per month. The difference is attributable to faster increases in the cost of living for the poor, due in large part to more rapidly rising food prices. The poverty line for 2000 from the Statistics South Africa discussion document is R322 per person per month. In 2005 purchasing-power terms, this updates to R414 using the overall Consumer Price Index and R431 using the Consumer Price Index for the poorest quintile of the population.

In order to benchmark the analysis, this report first presents an analysis of the poverty-reducing impact of South Africa's current system of social grants. This provides a basis for assessing the relative poverty-reducing impact and efficiency of increasing the size of the social pension compared to alternative social grant initiatives.

The poverty-reducing impact of the existing grants can be estimated by quantifying poverty indicators in the absence of social grants. Based on the micro-simulation analysis, South Africa's household poverty rate in 2005 without social grants would have been 70%, based on the R520 per month poverty line. Social grants reduce the poverty headcount rate to 68%. Based on the lower R500 poverty line, the household poverty rate would have been 69%, reduced to 67% by social grants. Using the lower poverty rate in the discussion document updated with the overall Consumer Price Index (CPI), the poverty rate is only 65% (and 66% if adjusted for the CPI for the poorest quintile), and social grants reduce these poverty rates by two percentage points in both cases. The small effect on the headcount poverty rate reflects the fact that most of the impact of social grants occurs beneath the poverty line. Existing social grants reduce the poverty gap by 19% using the Committee of Inquiry poverty rates and by 22-23% when using the discussion-document poverty rates.

The efficiency of the social grants also depends on the choice of poverty line. Using the lower poverty lines, the efficiency of the overall system of social grants is 60%. That is, for every R100 spent on social grants, the poverty gap is reduced by R60. However, with a higher poverty line, more of the social grants are provided to those considered 'poor'. As a result, using a poverty line of R520 per month yields a measured efficiency of 69% (and 67% with a poverty line of R500).

One can benchmark increases in social pensions based on these estimates. For example, an increase in the existing pension amount by a relatively large amount – R500 per month – lowers the poverty rate to 66%, based on the higher poverty lines. This is approximately the same magnitude of reduction as the impact of the entire system of existing social grants. The poverty gap, however, only falls by 6%. The efficiency is relatively high – at 78% the marginal efficiency is greater than the average efficiency of the entire system. However, using the lower poverty lines, the efficiency is only 72%, but the poverty impact is greater – the poverty headcount falls from 64% to 61% and the poverty gap falls by 6%. An increase in a universal social pension of R100 yields a marginal efficiency of 63% using the higher poverty lines, and marginal efficiency of 62% using the lower poverty lines.

Alternative scenarios for the sake of comparison include providing a lump-sum grant to caregivers of poor children and raising the Child Support Grant eligibility age from 14 to 18. Both of these demonstrate significant impacts in terms of both poverty reduction and efficiency.

Providing each caregiver with a grant equivalent to R180 per month reduces the poverty gap by 5%, as measured using the R520 poverty line, and yields the highest efficiency of any of the identified alternatives – 98%. Every R100 spent on the caregiver grant reduces poverty by R98. Using the R431 poverty line, the efficiency is a little lower – at 97% – but the poverty-reduction impact is greater. The poverty gap falls by 6%. This example highlights a recurrent theme – a trade-off between measured efficiency and poverty-reduction impact for different levels of the poverty line. Usually, one observes greater efficiency with higher poverty lines, but smaller reductions in the measured poverty gap.

Extending the eligibility age of the Child Support Grant to age 18 yields similar results. At full take-up, based on a poverty line of R520, the poverty gap falls by 8% and the efficiency is 97% – roughly comparable to the efficiency of the caregiver grant. Based on a poverty line of R431, the poverty-gap reduction is 11% – significantly greater than with the higher poverty line. The measured efficiency is 95% – somewhat lower than with the higher poverty line. This is another example of the trade-off identified in the previous paragraph.

These results show the substantial potential of social grants to reduce poverty in an efficient manner. Further increases in the size of the social pension have the greatest impact on the poverty headcount, while increases in smaller grants to children and caregivers have a greater impact on the poverty gap. The efficiency of increases in the social pension is higher than the average efficiency of the entire system of social grants – so further increases in pension size improve overall system efficiency. Increases in grants to children and caregiver grants yield marginal efficiencies in excess of 90%.

7. Linkages between the SOAP and the Broader Retirement System

Potential linkages between the provision of a universal SOAP and contributory pensions can lead to economies of scale with favourable implications for delivery, cost-effectiveness and policy coordination. International evidence on existing linkages is extremely limited. However, it is possible to broadly identify 5 types of synergies.

- Legislative Synergies
- Administrative Synergies
- Governance Synergies
- Fiscal Synergies
- Income Support Synergies

7.1 Legislative Synergies

According to the National Treasury the evolution of private and public pension funds in South Africa is associated with an uncoordinated legislative environment, characterized by several acts and regulators.[18]

Although the SOAP is administered publicly and contributory schemes are provided by the private sector, a common legislative document can be used to cover certain aspects of both schemes. For example, the 1997 legislation that created the universal SOAP in Bolivia also ended the PAYG social security system, which was replaced by pre-funded individual accounts under private management.[19] In Mauritius the National Pensions Act of 1976 covers the universal SOAP (and other social assistance schemes including support for widows, children and orphans) as well as contributory pension schemes. Common legislation can be useful for policy coordination and reducing fragmentation in social security provision.

7.2 Administrative Synergies

Given that the SOAP and contributory schemes have the common objective of providing income to older people, some administrative activities can be shared. This can be done through a government implementing agency responsible for social security. Sharing administrative infrastructure can lead to economies of scale with potential benefits for charge ratios.[20] In light of the high cost of retirement fund arrangements in South Africa's private sector relative to international benchmarks, it may be a worthwhile to consider greater administrative responsibility for a public entity.

In Mauritius the Ministry of Social Security through the National Pension Service (NPS) administers both the SOAP and the defined contribution schemes covering workers in the private sector.[21] The earnings-related schemes are the Contributory Retirement Pension (CRP), Contributory Widow's Pension (CWP), Contributory Invalid's Pension (CIP) and Contributory Orphan's Pension (COP). This means that the government has final responsibility for implementing all old age pensions in Mauritius.

7.3 Governance Synergies

A public entity can also assume a broad governance role for the national pension system. There are specific governance features that will be decided on within private funds such as board composition and voting rights of board members. However, other issues such as funding rules, protection of member and beneficiary rights, and the regulation of investments can be carried out by a specialized public institution. It is possible to design and provide incentives for a public institution to effect transparent and efficient governance of both the universal SOAP and other pensions, both public and private. At present a well-established system for redress for the majority of pension and provident fund members exists through the Pension Funds Adjudicator.[22]

The governance structure of a publicly sponsored retirement fund can be administratively cheaper and safer than private funds.[23] Public oversight can be fairly efficient. In Bolivia, it is estimated that about 6,000 recipients – 1.6% of the total recipients – are receiving the universal SOAP without strictly qualifying, at an annual cost of US$2 million. In contrast, during the transition from PAYG to the pre-funded system, an estimated 50,000 fraudulent recipients were in the system, costing tax payers approximately US$100 million per year.[24]

7.4 Fiscal Synergies

The amount paid by the SOAP is constrained by how much tax revenue is available for social security versus competing national priorities. It is possible to relax this budgetary constraint by tapping into the funds in the contributory schemes. In Mauritius

[18] National Treasury (2007)
[19] Willmore (2006)
[20] Department of Social Development (2006a)
[21] Gopee (2006)
[22] National Treasury (2007)
[23] Department of Social Development (2006a)
[24] Willmore (2006)

the introduction of contributory pensions in 1976 led to a significant increase in the value of the SOAP. The contributory pensions were able to inject a new lease of life into the non-contributory schemes.[25]

Although the introduction of the contributory pensions was associated with an increase in the amount paid through the universal SOAP, it is important to point out that sustaining a universal SOAP in the long run by converting forced saving into payroll taxes is inappropriate. It is considered best practice to finance the SOAP through general taxation, as is currently the practice in South Africa.

7.5 Income Support Synergies

An important issue is whether recipients of contributory pensions have sufficient income, to the extent that they do not need to receive a SOAP benefit. While this may be the case for high-income earners, the SOAP will be important for low-income earners. When the contributory scheme was introduced in Mauritius it was expected that the SOAP would gradually be phased out. The SOAP was intended to be a temporary measure until the contributory scheme was established. However, contrary to these expectations the SOAP has not been replaced by the contributory scheme, even for high-income individuals. Instead, the two schemes are viewed as supplementing each other.[26]

The SOAP in Mauritius represents about 18 percent of the national average wage and about 37 percent of the basic salary of a skilled worker. The earnings-related component allows a skilled worker to receive approximately 30 percent of his or her career-average revalued earnings. This means that, under the combined SOAP and earnings-related components of the NPS, a skilled worker can receive a total pension equivalent to about 67 percent of his or her basic salary.[27]

7.6 Summary

Common legislation covering a universal SOAP and the broader retirement system can promote more harmonized pension provision.

Scale economies can be gained by having a single administrative authority covering key aspects of the national pension system.

Specific governance activities can be carried out efficiently by a specialized public institution.

A universal SOAP and contributory pensions are complementary income for older people and can work together to ensure that recipients are able to cover their basic requirements.

8. A quantitative assessment of the financial implications of the universal social pension

EPRI has quantified the gross cost of a universal pension under several scenarios for take-up, ranging from 75% to full take-up, given the assumption of an unchanged benefit level. Based on experience in other countries, an initial 75% take-up rate would constitute a reasonably expected outcome. Over time this is likely to rise to 90% or more over the first few years. Eventually, depending on the private costs to individuals, the take-up rate might approach 100%.

The total age-eligible population depends on the scope of the universal pension. If provided to all those currently age-eligible for the social pension, the total number of recipients in 2005 would have been 3.1 million people (7% of South Africa's population in 2005). An additional 0.5 million men would be included if the male eligibility age were reduced to 60 years – which would increase total participants by 16%. In 2005 2.1 million older people actually received the social pension (representing 68% of the age-eligible population), and an estimated 0.2 million additional older people were eligible but did not receive the grant (equivalent to 6% of the age-eligible population). In terms of eligibility attributable to the elimination of the means test, a universal social pension would add 0.8 million people to the system (based on current age thresholds). Income-ineligible older people represent approximately 26% of the age-eligible population. These numbers are summarized in the table below.

Table 5:
Classifying recipients under a universal social pension

Demographic category (July 2005)	People	Percent
Total age-eligible population	3.1 million	**7%**
Actual recipients	2.1 million	68%
Eligible non-recipients	0.2 million	6%
Income ineligible older people	0.8 million	26%
Males aged 60 - 64	0.5 million	16%

Source: EPRI Micro-simulation Model with Statistics South Africa GHS 2005 data

The cost of providing the 2007/08 level of the pension (R870 per month) to an additional 0.8 million age-eligible but income-ineligible older people is approximately R8.4 billion per year. This is the most expensive scenario – assuming full take-up. This does not include the cost of the additional 0.2 million older people who are currently eligible but not receiving the pension (approximately R2.1 billion). Equalizing the age of pension eligibility for men and women at 60 years would also involve additional expense (approximately R5.2 billion).

In practice, the cost of a universal social pension is likely to be somewhat lower, particularly in the first few years, depending on the rate of take-up. Assuming an initial take-up rate of 75%, the number of eligible people receiving the pension would rise from 1.9 million to 2.3 million people – an increase of 18.4%. The number of income-ineligible people would fall to zero because of the elimination of the means test. The number of social pensions paid would increase by 9%, at a cost of approximately two billion Rand per year. The numbers are summarized in table 6.

[25] Willmore (2003)
[26] Willmore (2003)
[27] Gopee (2006)

Table 6: The cost of a social pension with 75% take-up

Analysis of the Older Persons Pension	Existing means test	No means test (75% take up)
Eligible people receiving pension	1,936,986	2,292,718
% increase in eligible people		18.4%
Ineligible people receiving	165,463	0
Total people receiving the pension	2,102,449	2,292,718
% increase in people receiving the pension		9.0%
Rand increase in cost of pension (millions)		R1,985
Eligible people NOT receiving the pension	309,456	764,239
Ineligible people NOT receiving the pension	645,053	0
Total age-eligible people	3,056,957	3,056,957
Eligible people	2,246,442	3,056,957
Eligibility ratio	73.5%	100.0%
% increase in number of eligible people with new test		36.1%
Exclusion error	13.8%	25.0%
Inclusion error	7.9%	0.0%

Source: Statistics South Africa GHS 2005 and EPRI Micro-simulation model

Given the assumption of 75% take-up, the number of eligible people not receiving the pension rises from 0.3 million to 0.8 million, with the total age-eligible population constant at 3.1 million people. By definition of universal, the eligibility ratio rises from 73.5% (people who satisfied the means test) to 100% (universalism). As a result, the number of eligible people rises by 36.1%. Exclusion error rises in the short run – from 13.8% with the means test to 25%, a result that is entirely a consequence of the assumption of 75% take-up. Inclusion error falls from 7.9% to zero – a consequence of the elimination of the means test.

Over time, the cost of a universal social pension would rise as the take-up rate increased (and in response to forecasted demographic change). Assuming an increased take-up rate of 90%, the number of eligible people receiving the pension would rise by 2.8 million people – an increase of 42.0% compared to 2005 levels. As with the previous scenario, the number of income-ineligible people remains zero because of the elimination of the means test. The number of social pensions paid would increase by 30.9% (compared to 2005 levels), at a cost of approximately 6.8 billion Rand per year. The numbers are summarized in the table below.

Table 7: The cost of a social pension with 90% take-up

Analysis of the Older Persons Pension	Existing means test	No means test (90% take up)
Eligible people receiving pension	1,936,986	2,751,261
% increase in eligible people		42.0%
Ineligible people receiving	165,463	0
Total people receiving the pension	2,102,449	2,751,261
% increase in people receiving the pension		30.9%
Rand increase in cost of pension (millions)		R6,767
Eligible people NOT receiving the pension	309,456	305,696
Ineligible people NOT receiving the pension	645,053	0
Total age-eligible people	3,056,957	3,056,957
Eligible people	2,246,442	3,056,957
Eligibility ratio	73.5%	100.0%
% increase in number of eligible people with new test		36.1%
Exclusion error	13.8%	10.0%
Inclusion error	7.9%	0.0%

Source: Statistics South Africa GHS 2005 and EPRI Micro-simulation model

These figures refer to the gross costs of the pension reform. The net costs reflect adjustments to tax revenue associated with the pension reform. The quantification of the net cost depends on the tax treatment of the social pensions, the actual benefit level, and the form of tax system adjustments implemented to finance these costs. This question is addressed in the next section.

9. An evaluation of a 'tax clawback' approach to targeting, and recommendations for the appropriate tax treatment of the universal pension

There are a number of relevant tax treatment options for integrating social pensions into a multi-pillar system of social security. International experience demonstrates a range of practices for tax treatment adopted in various countries, but usually favourable arrangements are provided for at least a basic level of savings. These incentives are often reduced progressively and eliminated above a certain level. In some cases, tax incentives are provided during the accumulation phase, but pension benefits are taxed during retirement. In other cases, the benefits themselves are tax-free. The definition of a social pension implies the absence of contributions – so much of the potential complexity of tax treatment is moot.

The focus of tax treatment for social pensions is on the benefit side, and some options recuperate some or the entire amount of pension paid to higher-income individuals. This recuperation is sometimes referred to as a 'tax clawback'. The 'tax clawback' would generally utilize a combination of tax mechanisms:

- tax thresholds that are adjusted (often at several levels) in order to recover part or all of the pension from higher-income individuals;
- tax rates that are adjusted to recover the pension more gradually, although with redistributional effects for the highest income earners;
- the tax treatment of the pension benefit itself (either taxable or non-taxable).

The tax clawback does not necessarily affect current recipients of the social pension. Given the current means-test thresholds, the maximum amount of earned and taxable income consistent with pension eligibility plus the actual amount of the social pension falls below the taxable threshold. Regardless of the change in the tax treatment of the pension, currently eligible recipients would not owe tax.

However, a universal pension would provide benefits to many high-income individuals, and the tax treatment would determine the net benefits they received. Table 8 provides examples of a few options for tax treatment of universal pensions, with calculations based on current income tax rates, with adjustments as indicated in the table. For example, if the pension were simply treated as taxable income, current pension recipients would continue to pay no tax because they are under the taxable threshold – as illustrated in the "Tax option 1" row in the table below. An individual with R5 000 a month in other income would incur an additional tax liability of R148 a month – receiving a net benefit from the pension of R672. An individual with R50 000 a month in other income would incur an addition tax liability of R328 a month – receiving a net benefit from the pension of R492. In this manner a universal pension can generate a progressive outcome.

More tax could be recovered through adjustments to tax thresholds. For example, in "Tax option 2" below, social pension recipients in the highest tax bracket (over R400 000 a year) return their entire social pension back to the National Treasury through taxes, while older people below this threshold retain a net benefit. "Tax Option 3" recovers even greater tax revenue – social pension recipients with other income in excess of R40 000 per year pay back some or all of the pension through taxes, while older people currently outside the tax net continue to pay no tax. In all the examples presented here, existing social pension recipients would continue to pay no tax on their pensions.

Table 8: A universal pension under the current tax system and alternative options

Tax options	Net benefits for examples of representative older people		
	Older person **"A"** Other income: R 0	Older person **"B"** Other income: R 5 000	Older person **"C"** Other income: R 50 000
Tax option 1: pension is treated as taxable income with no other tax adjustments.	Additional tax paid: **R 0** Net pension benefit: **R 820**	Additional tax paid: **R 148** Net pension benefit: **R 672**	Additional tax paid: **R 328** Net pension benefit: **R 492**
Tax option 2: pension is treated as taxable income and highest threshold is adjusted to recover it from highest income earners.	Additional tax paid: **R 0** Net pension benefit: **R 820**	Additional tax paid: **R 148** Net pension benefit: **R 672**	Additional tax paid: **R820** Net pension benefit: **R 0**
Tax option 3: pension is treated as taxable income and lowest threshold is adjusted to recover it from all income taxpayers.	Additional tax paid: **R 0** Net pension benefit: **R 820**	Additional tax paid: **R 820** Net pension benefit: **R 0**	Additional tax paid: **R 820** Net pension benefit: **R 0**

Source: EPRI Micro-simulation Model

The most direct tax treatment question is that of the taxable nature of the social pension itself. Given the current structure of tax rebates, the net effect of taxing or not taxing the social pension can be completely offset through adjustments to tax thresholds. Given that most recipients of the social pension are likely to fall outside of the tax net, administrative considerations tend to favour a non-taxable treatment of social pensions – with adjustments to tax thresholds to recover the social pension progressively from higher and higher income recipients.

For example, consider a social pension of R870 per month. In order for an existing recipient to be eligible, the older person must have income below the income tax threshold. Making the social pension taxable would have no impact on this individual – unless he or she had begun to receive additional income. Even the maximum income consistent with eligibility combined with a full pension is less than the current tax threshold.

However, consider an individual near the tax threshold. Making the pension taxable may push this older person into the tax net. However, the administrative and private costs of a small pension-related tax collection may not be cost-effective – particularly since it undermines the social protection provided by the pension. In this case, the taxable nature of the pension might make a difference – but it still might be worthwhile to leave pension income untaxed.

The third case involves any individual currently with income in excess of the income tax threshold. The taxable treatment of the pension would clearly affect this individual's finances. An individual receiving a monthly pension of R870 and remaining in the 18% tax bracket would owe additional taxes of R1879.20 if the pension were treated as taxable. A reduction in the tax rebate for older people of this amount would yield the same effect, while keeping social pensions non-taxable, however. The only substantial impact would arise in the case of social pension recipients in higher tax brackets. Over time, these older people are the ones who will have financed previous generations of social pensions. General progressive adjustments to tax thresholds (and possibly tax rates) may provide a better mechanism for recuperating the social pension from higher-income individuals, even more gradually over the taxpayer's income-earning lifetime.

There are three general options for the tax adjustments required to finance the social pension – and as a result claw back the social pension from upper-income individuals:

- Non-progressive proposals that adjust the lowest tax threshold, while keeping marginal rates unchanged. (For example, the South African Revenue Service might simply maintain the initial threshold at R43,300 for about three years.)
- Progressive proposals that require adjustment of tax rates (see below) or lowering of tax thresholds at higher income levels.
- Combination of adjustments to tax rates and all thresholds

For example, the table below compares two progressive tax rate schedules to the existing tax rate schedule. Both proposal 1 and proposal 2 generate approximately the same incremental revenue – but proposal 1 shifts a somewhat greater share of the burden onto lower-income earners, while proposal 2 is more progressive.

Table 9: Scenarios for tax rate adjustments to finance a social pension

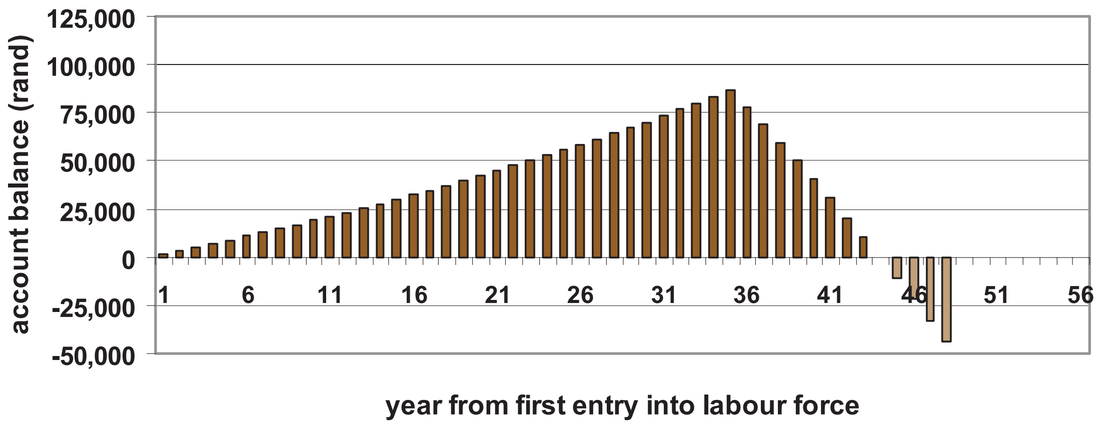
Income threshold	Existing marginal rates	Progressive proposal 1	Progressive proposal 2
Up to 43,300	0.0%	0.0%	0.0%
43,301 to 155,800	18.0%	19.1%	19.0%
155,801 to 223,300	25.0%	26.5%	26.0%
223,301 to 293,300	30.0%	31.8%	32.0%
293,301 to 393,300	35.0%	37.1%	38.0%
393,301 to 493,300	38.0%	40.3%	41.0%
more than 493,300	40.0%	42.4%	43.0%

Source: EPRI Micro-simulation Model

This focuses the question of tax treatment on those provisions necessary to finance the cost of the social pension, particularly for the higher-income beneficiaries. Given the government's commitment to poverty reduction through comprehensive social security, the additional cost of financing social pensions to those currently eligible but not receiving the grant is part of government's existing commitments. Making the pension universal simply helps the government to meet this obligation in the most cost-effective manner possible. For example, an estimated additional tax payment of approximately R1,700 per current taxpayer will finance the provision of the social pension benefit to all those who currently do not qualify according to the means test. Should this additional tax be regarded as an increase in the tax burden? Or should it be regarded as an effective contribution to a basic pillar in a more comprehensive system of social security?

A simple illustration frames the question. A woman who enters the labour force at age 25 and contributes R1,700 per year (in real terms – inflation is disregarded) will generate a hypothetical portfolio (compounding at 2% in real terms) that reaches a value of approximately R87,000 by the time the worker retires at age 60. As illustrated in the figure below, this nest egg would hypothetically finance approximately eight years of her social pension.

Figure 2: The time path of a hypothetical representative social pension portfolio (with 35 years in the labour force)



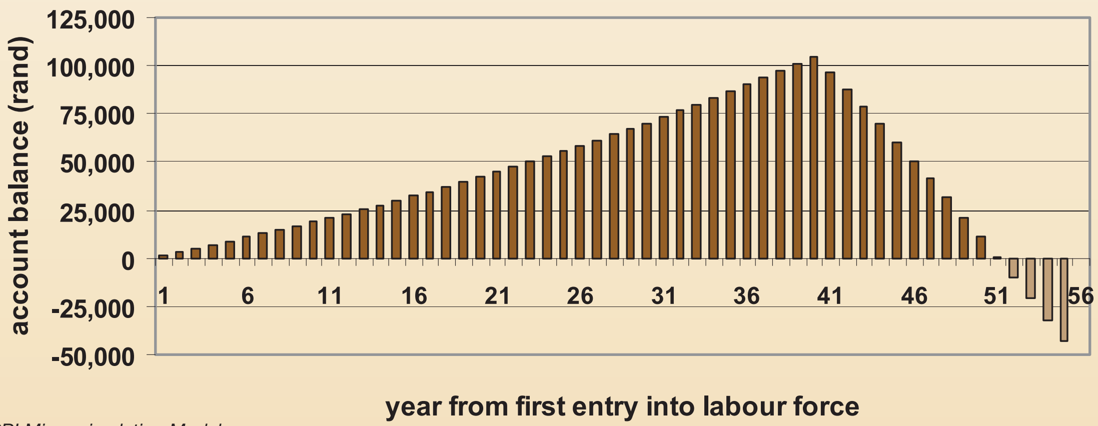
Source: EPRI Micro-simulation Model

This figure illustrates an inter-temporal 'clawback' from upper-income individuals through tax 'contributions' over their working lives. The consistently lowest-income individuals would be outside the income tax net – they would never contribute through income taxes to a 'hypothetical' investment portfolio. These older people would simply receive a pure social pension – without any actual or hypothetical contribution. The highest-income individuals might contribute much in excess of the R1700 per month illustrated here, depending on the specific set of adjustments made to tax rates and thresholds. The average worker who pays income tax would 'contribute' an additional R1700 per year over his or her working life. The 'clawback' would precede the actual pension payments – but contribute to national savings and provide a more affordable financing mechanism.

The assumptions of the example determine the time path of the portfolio. For example, suppose the individual works for an addition five years. Suppose a man enters the labour force at age 25 and contributes R1,700 per year (again in real terms). He will generate a hypothetical portfolio (compounding at 2% in real terms) that reaches a value exceeding R100,000 after forty years. As illustrated in the figure below, this accumulation would hypothetically finance approximately eleven years of his social pension.

This analysis provides a framework for assessing the tax clawback. First, the clawback only finances those who are currently ineligible given the existing means test – any additional expense of providing the social pension to those currently eligible but not receiving it (exclusion error) is a pre-existing government commitment. The new burden can be quantified statically by determining those currently age eligible but ineligible due to the means test. Given tax-free treatment of the social pension, the immediate clawback would be zero. Since some provision must be made to finance the additional burden, however, the required tax adjustments constitute the effective clawback. The design of these adjustments determines the relative progressiveness of the clawback. The clawback, however, is by nature inter-temporal. One must assess the lifetime clawback of a participant in terms of the profile of effective tax 'contributions' and social pension 'benefits'. Current older people will have higher net benefits – since they will have contributed over a shorter horizon. Future older people will have lower or possibly negative net benefits – since they will have contributed over a longer horizon.

Figure 3: The time path of a hypothetical representative social pension portfolio (with 40 years in the labour force)



Source: EPRI Micro-simulation Model

10. Recommendations

The South African and international evidence on universal social pensions – based on cross-country comparisons, micro-simulation analysis and South Africa's experience – provides a basis for recommendations with respect to making the State Old Age Pension universal as part of broader retirement reform.

It is recommended that the government eliminate the means test on the State Old Age Pension. This will facilitate integration of the social pension into a multi-pillar social security system and eliminate the social and economic costs of means-testing.

It is recommended that the size of the benefit be increased by an amount higher than the annual inflation-indexed adjustments. This will efficiently increase the poverty-reducing impact – in terms of both absolute and relative poverty – of the pension. It can also serve as compensation for low-income workers who have historically been excluded from contributory or other work-related schemes. A proposal for an explicit work-related non-contributory pension will require further definition of scope and depend on systems that track compliance with eligible work requirements.

It is recommended that the regulation and supervision of all private and public retirement funds is placed under common legislation. This is in line with a proposal for a South African Retirement Funds Act. However, it may be optimal to leave the universal SOAP under the South Africa Social Security Act (SASSA) of 2004 and the Social Assistance Act of 2004.[28] SASSA has the mandate to manage, administer and pay social assistance.

It is recommended that the process of drafting the South African Retirement Funds Act consider the establishment of a public specialized governance agency. This agency could be established by expanding the mandate of the Pension Funds Adjudicator to cover issues beyond redress for pension and provident fund members. However, some governance aspects of the universal pension (such as complaints by pensioners not receiving their benefits) can remain within the mandate of SASSA.

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[28] Government of South Africa (2004a) and (2004b)

Part 2

South Africa's Old Age System: Evaluating Design Alternatives

by Rob Rusconi

Part 2

CONTENTS

GLOSSARY OF TERMS

BSP — **Basic State Pension**, the generic term used to describe a flat pension payable to all citizens. The existing State Old Age Grant is a form of Basic State Pension, currently means-tested. All modelling in this paper assumes that the means test falls away, generalizing the benefit to a universal pension.
Example: the state commits to pay all citizens a monthly pension of R100, starting from age 62 and growing at the rate of inflation.

DB — **Defined Benefit arrangement.** The benefit received by participants is based on a formula related to earnings, usually late-career earnings. All modelling in this paper assumes that the defined benefit formula is always based on inflation-adjusted career-average earnings.
The accrual rate is the multiple applied to earnings in each year of service to obtain the benefit.
Example: a 55-year-old joins a career-average defined benefit arrangement with an accrual rate of 1% and retirement age of 65. The benefit received at the end of the 10 years of work is 10% of the inflation-adjusted average salary earned during that period.

DC — **Defined Contribution arrangement.** The benefit received by participants is based on the contributions paid and the investment returns, net of costs, gained on those contributions. Benefits are not guaranteed. The accumulated saving is used to purchase an annuity at rates applicable at the time of purchase, and annuity payments are assumed to increase at the rate of inflation.
Example: a 55-year-old joins a defined contribution arrangement with a contribution rate of 10% of earnings and a retirement age of 65. The benefit received is the inflation-linked annuity that can be purchased at the time of retirement with the accumulation of 10 years of contributions and investment returns.

FAP — **Flat Accrual Pension**, the term used to describe a pension consisting of a flat monthly amount for each year of participation in the system.
Example: a 55-year-old joins the old-age system and becomes eligible to receive a monthly pension of R50 for each year of participation in the system, inflation-adjusted, with a fixed retirement age of 62. The benefit received from age 62 is R350 monthly, increased by inflation over the seven-year period of accrual, and thereafter increasing each year also at the rate of price inflation.

QE — **Qualifying Earnings**, the term used to describe that part of the income of an individual that is used to set contributions and benefits under the system. All calculations presented in this paper assume that earnings above R12 000 a year are defined as qualifying earnings for the purposes of both contributions and benefits.
Example: a 55-year-old earning R3 500 monthly joins a national defined contribution arrangement with a contribution rate of 10% of qualifying earnings. The top R2 500 of income is used to determine the contribution rate, which is thus R250 monthly.

RR — **Replacement Ratio**, the starting level of retirement income expressed as a proportion of the highest level of earnings prior to retirement, commonly used as a measure of post-retirement prosperity. Replacement ratios vary from person to person, and are very sensitive to the assumptions underlying the modelling.
Example: on retiring, an individual earning R80 000 a year receives a monthly pension of R5 000. The replacement ratio is 60 000 ÷ 80 000, which is 75%.

Other Acronyms

ASSA — **Actuarial Society of South Africa.** The Society produces a demographic model of the population of the country, focusing on the development of the AIDS pandemic, but it is also highly regarded for general population-projection purposes and its sensitivity to changes in the dynamics of the pandemic, at least in the short and medium term.

GHS2005 — **General Household Survey,** an annual household survey by StatsSA designed to measure various aspects of the living circumstances of South African households. There are five broad areas covered by the GHS: education, health, activities related to work and unemployment, housing and household access to services and facilities. The survey in 2005 was conducted in July 2005 and covered some 30 000 households, with the results scaled to the total population using weights derived from the 2001 Census. The database used for this study was provided by StatsSA and further variables needed for Social Security modelling were derived by EPRI and Professor Heather McLeod.

SOAG — **Social Old Age Grant,** the monthly means-tested social-assistance transfer to the elderly, currently paid at a rate of R870 to all women aged 60 and older and all men starting from age 65.

SUMMARY

South Africa is undertaking a review of the manner in which it provides for its elderly – a complex, multi-faceted process requiring considerable examination and discussion. This paper describes the high-level technical analysis intended to support consideration of the fundamental elements of the design of this system. This is supported by a broader discussion on the advantages and disadvantages of the alternative benefit designs in the prologue.

Two models are crucial to this process of analysis:

- A long-term financial model considers the affordability of a number of design alternatives by estimating the cash flows expected under each alternative. This might be referred to as *the macro* model.
- An individual model estimates the retirement position of participants in relation to their pre-retirement earnings. Some would refer to this as the *micro* model.

Together, these models shed light on the characteristics of each of the options available to policymakers. The analysis suggests that within the bounds of reasonable financial uncertainty, the following set of benefits is affordable, at an overall contribution rate of 15% of total annual earnings above R12 000, and provides acceptable cross-subsidy from wealthy participants to poor:

- A **Basic State Pension** at the current levels: R800 monthly in 2005 terms, increasing annually at the average of price- and wage-inflation, payable from age 60 to all resident women and from 65 to all resident men, with appropriate automatic increases to the retirement age.
- A **Defined Benefit** for each year of service of 0.75% of annual earnings above R12 000 (constant in 2005 money terms), supported by a contribution of 6% of earnings defined on the same basis, payable from age 65 to men and women, with appropriate automatic increases to the retirement age.
- A **Defined Contribution** accrual of 6% of annual earnings above R12 000, with benefits receivable from a recommended age 65, also increasing in line with price inflation.

The long-term viability of the system depends on the implementation of a flexible set of parameters, the most important of which is the facility for automatic increases to the retirement age under the Basic State Pension and Defined Benefit components.

This is a discussion document. Modelling assumptions are set out in the appendix and the recommendations are cast in general terms. On both issues, comments are most welcome.

PROLOGUE: DESIGN ISSUES

The range of considerations on system design is broader than may be set out in a technical discussion. This prologue is intended to capture these issues. The discussion is structured around two primary objectives, saving and redistribution, and three design axes or fundamental parameters: risk, funding and management.[1]

Objective 1: saving

It is simplistic to suggest that policymakers should have only two objectives in mind when designing a retirement system, but many of the broader goals of the system are related in some way to these two primary purposes. First, the government wants its citizens to save.

The main reason for a working individual to save is motivated by consumption smoothing, putting aside excess income to provide for the years later in life when work is undesirable or simply not possible.

Simplistically speaking, government has a rather obvious reason for wishing individuals to save for their golden years. If they have saved for their retirement they are less likely to be a burden on the state.

But there are many others reasons for government to have an interest in personal saving. Some of these are macroeconomic in nature. Increased national saving provides a buffer against the economic volatility induced by international capital flows. It also potentially lowers the cost of capital, increases investment and improves employment levels, a virtuous cycle enjoyed by Chile flowing from reform of its labour markets and pension system.

Government also has an interest in household saving because the security provided by this saving enhances the well-being and productivity of workers, whether or not the financial accumulation is accessible prior to retirement.

To back up these motivations, the large majority of governments provide incentives to citizens to save for retirement, most commonly in the form of a tax break, but sometimes as an explicit financial contribution to these savings.

Governments would like to ensure that the subsidy provided to retirement savings is well spent, so they give substantial attention to the regulatory structure established to safeguard these asset accumulations. Regulation commonly imposes conditions on private-sector firms, designed to enhance the security of deposited amounts and the net investment returns earned thereon. The need for security is the main driver of the chapter in this series covering the accreditation of private-sector providers in an opt-out environment.

This additional security is just as well, because there is little clear evidence that the government incentive actually increases aggregate household saving, at least not by more than the amount of the incentive itself. It is also true that there is no evidence that it doesn't work either, so it is not necessarily the

[1] This note draws partly on an article previously submitted by the same author to the publication *Collective Insights*.

case that tax breaks should be dismantled. Not only are there considerable benefits to drawing savings into a safe environment but the impacts of removing existing tax incentives are deeply uncertain.

To reiterate, it is in the interest of government for citizens to save for retirement and most countries back this with finance.

Objective 2: redistribution

All governments, to a greater or lesser extent, put resources into looking after the poor. They do this in a number of ways, through explicit cash transfers – South Africa pays a variety of grants – and through initiatives that have greater benefit for the poor than the wealthy, such as free or subsidized healthcare.

Personal taxes are another common form of redistribution. Wealthy citizens pay income tax at higher proportional rates than their middle-income counterparts and the poorest in a country seldom pay income tax. General sales tax or value-added tax may exclude goods that meet basic needs and form a larger portion of the household budget of the poor.

Similarly, redistribution forms a fundamental objective of old age policy. Governments have a moral and financial obligation to provide for citizens who cannot save for retirement. They usual meet this obligation using both cash and non-cash methods, often with some attempt at focusing resources on those who need them most, through means tests.

Most take the view that redistribution is philosophically and morally correct. What separates policymakers is the extent to which redistribution should take place. This is not helped by a poor understanding of how redistribution should be determined and what the options are for increasing or decreasing redistribution. The technical content in this paper is intended to go some way towards addressing this problem by illustrating a set of calculations showing the extent to which low-income system participants are expected to receive higher proportional benefits than their high-income counterparts.

Other policy goals include

- fiscal sustainability,
- system efficiency and security,
- coverage and savings levels,
- inflation protection,
- death and disability protection,
- gender equality, and
- the impacts on marginal groups.

Each of these goals should be carefully defined and objectively measured if it is to serve as a useful benchmark of progress.

Design fundamental 1: risk

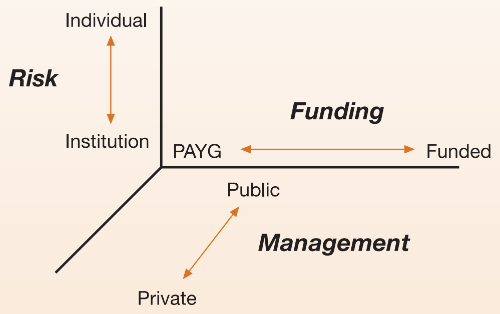
The chart below provides a simplified framework of the three design fundamentals. Each element of a national system could be plotted on this chart so that, together, they might show the underlying characteristics of the system – for example, how well the elements combine to diversify risk.

Along the vertical axis is the first of these fundamentals. This is commonly labelled as a design issue, with defined benefit at the bottom and defined contribution at the top. However, underlying design is the issue of risk. What matters here is not how the system is defined but which entities bear the risk, so it is preferable to define this design fundamental by the locus of risk. At the bottom of the axis on the chart, risk is carried by an institution, an employer or government. At the top, risk is borne by an individual.

Models under which the institution bears the risk include

- employment-based defined benefit arrangements providing benefits with reference to members' pre-retirement earnings, and
- social security systems under which benefits are determined in advance, paying a flat proportion of minimum wage, for example, or defined by reference to a participant-specific variable, like income.

Descriptive framework for a national system



The most common model under which individuals carry the risk is the defined contribution plan. Benefits are determined by the accumulation of contributions and investment returns over the working life of the participant.

A number of variations are possible that share risks between individuals and institutions. These have been implemented in various ways around the world, both at national and company level. Probably the simplest way to share risks is to provide a mix of defined benefit and defined contribution, giving a part of the advantages of each element.

What are these advantages at a national level? The defined benefit arrangement:

- insulates participants against investment volatility,
- protects them against the enormous uncertainty around the conversion of an accumulated lump sum to an annuity, and
- establishes a form of solidarity across generations of participants by providing similar benefits to each generation no matter the market and economic conditions in which they find themselves.

The inter-generational contract is not unlimited, however. Over long periods of time, benefits must be allowed to adjust to poor investment returns or, if the arrangement is not prefunded, to changes in the balance between working-age contributors and elderly recipients. Appropriate flexibility of design is the best way to manage this uncertainty. This hints at the most important disadvantage of the system: the government bears the risk, taking on fiscal responsibility that it must manage with care.

Finally, it is potentially subject to abuse, as interest groups aim to enhance their benefit from the system, for example, by lobbying for an early retirement age, at the expense of all other members. This must be properly guarded against.

The defined contribution alternative:

- establishes a direct link between contributions and benefits, motivating participants through the build-up of tangible benefit,
- provides flexibility at individual level on investment options and the timing of retirement, fairly rewarding participants for postponing their retirement and penalizing them should they bring it forward.

The inherent individual fairness of the defined contribution system must be balanced against the risks placed in the hands of individuals, the risk of investment volatility and the risk of poor market conditions at the time when accumulated funds are converted into an annuity.

The greatest problem with defined contribution systems is that they depend on the payment of a contribution. The link between this contribution and the eventual benefit removes all ability to protect the marginalized. This is not a problem in an employment context, but at the level of society as a whole, could be very problematic. For example, women work less than men. Under a defined contribution system, there is no protection for periods of unemployment when contributions are not paid. Women also earn less than men, on average. Again, the simplicity of the defined contribution system is its main difficulty: it is very difficult to find ways to protect those whose savings are affected by the employment market.

Defined benefit arrangements share this disadvantage to some extent, since benefits are accrued principally by contributing while working. But the difficulties of the defined contribution system can be mitigated in the defined benefit alternative through providing credits during periods of disability or child care, or by setting the contributions and benefits so that some form of redistribution becomes inherent to the system.[2]

Social assistance systems, like the existing Social Old Age Grant, generally share the pros and cons of defined benefit arrangements. But they have the added advantage that benefits are not dependent on employment, so they address better the difficulty of poor employment rates among certain groups in society, for example women.

Design fundamental 2: funding

South Africans are familiar with funded systems. All company-based arrangements aim to be fully funded at all times, which means that liabilities – the promises to pay benefits – are backed by assets held in trust. This applies to defined benefit arrangements as well as their defined contribution counterpart.

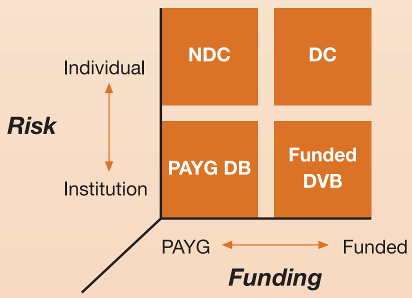
Not all old age plans are funded. Many social security arrangements are completely unfunded, for example South Africa's social grant system. Benefits under this system are paid each year from general tax revenues.

Other national systems have some asset backing and might be described as being partially funded. The absence of funding is not automatically equivalent to bankruptcy, but it exposes the sponsor to risk that the source of funds becomes smaller and the demand larger. The most common cause of this, in the context of a pension system, is an ageing population. The taxpayer base shrinks, the recipient base expands and something must change for the system to remain viable. This is the cause of most of the national social security crises of the last two or three decades and the wave of reforms precipitated by them.

Funding is generally preferable, since demographic risks are protected against. But funding is not a perfect solution. Funding can be expensive, as shown by recent research around the world and particularly in South Africa.[3] More subtle is that funding can suggest security that doesn't really exist. If the fund invests significantly in government loans, then the government is effectively borrowing from today's workers to pay today's pensioners, so that part of the liability might as well not be pre-funded at all.[4]

The fundamentals of risk and funding can be illustrated by demonstrating the four possible combinations (refer to the chart). The two defined benefit options appear in the bottom left and bottom right corners, respectively unfunded (also called pay-as-you-go, or PAYG) and funded. The funded option is considered more appropriate, as it addresses the issue of demographic risks. Costs can be controlled through the appropriate use of governance structures.

Descriptive framework: risk-funding combination



The defined contribution option is in the top right corner. Its neighbour to the left, an unfunded defined contribution structure, is referred to as a notional defined contribution arrangement (NDC). This structure is used in a number of countries, as varied

[2] Again, these must be introduced with care since they add complexity and are the natural targets of lobby groups seeking to improve their own position to the detriment of the rest of members and the system as a whole.
[3] This cost is addressed in the discussion of the accreditation system, where a charge cap is mooted as a possibility.
[4] This only presents part of the story, of course. In an unfunded situation, the government is borrowing the whole amount of the liability, a situation that is probably worse than establishing a fund and investing in gilts.

as Sweden and Mongolia, and should not be ruled out lightly. Participants pay contributions according to a fixed set of rules and these are used to pay benefits. The structure keeps a natural financial balance by crediting the participants with increases to their notional accounts each year that bear relationship to the corresponding increase in the aggregate wages of the group. This may not work well if the demographics of the group are subject to wide variation, as could be the case in South Africa's fluid labour market, and is not considered in detail in the modelling that follows, but it should not be ignored as an option.

Design fundamental 3: management

The third aspect of design is concerned with whether the public sector or private sector is better able to manage the pension system.

This should not be viewed as a simple either / or decision, because management can be considered in four distinct areas:

- contribution collection,
- record-keeping,
- management of assets, and
- disbursement of benefits.

Both National Treasury and the Department of Social Development have proposed a model that mixes private- and public-sector involvement in these areas. A defined benefit arrangement must be centrally managed, but outsourcing of asset management is possible. The discussion on provider accreditation suggests that, under the defined contribution component, the contributions should be collected centrally and that all other parts of the process should be administered by the entity selected by the participant, where the default in the absence of election is the public-sector provider.

Concluding comments

This discussion illustrates the wide and complex range of issues that should be considered when designing a national system. Careful consideration of the advantages and disadvantages of each design parameter, in combination with the others and in the context of the objectives of the system, is urged.

The technical analysis that follows is conducted on the assumptions that:

- both saving and redistribution are important objectives,
- risk should be shared by individuals and the government in an appropriate manner,
- funded systems are inherently safer than their pay-as-you-go alternatives, and
- management is shared by public- and private-sector institutions in a manner designed to maximize the efficiency of the overall system.

1. INTRODUCTION

This document forms just one of a suite of papers exploring different aspects of South Africa's old age and formal retirement system. It describes a technical analysis of two models supporting the complex considerations of system design. It does so in a manner intended to be relatively straightforward, but detailed enough to permit intelligent consideration of design variations not explicitly considered herein. In that sense, it is both a technical paper and a discussion document.

As this paper reports a technical analysis, it does not explicitly cover the many other considerations that go into the design of a pension system. Interested readers should refer to discussion of these issues both international and South African.[5]

Section 2 describes the methodology, supported by discussion of the modelling assumptions provided in the appendix. Section 3 sets out the financial characteristics of the candidate components of the system and section 4 shows how these might be combined into four different options. Section 5 suggests the rationale for combining these components and puts forward a recommended combination. As the analysis described in this paper is foundational, that section adds thoughts on possible further modelling.

The parameters are kept deliberately straightforward, facilitating simplified consideration of alternatives. This means that the models compromise some real-world complexity. They do not allow for personal tax, for example, and they do not consider the impacts of National Treasury's proposed wage subsidy (National Treasury 2007). This approach is designed to provide a foundation for further discussion together with a candid description to the approach taken to a number of the thorny issues that face any attempt to project the finances of a system 75 years into the future.

The assistance of many people is gratefully acknowledged. Heather McLeod has been tireless in her analysis of General Household Survey (GHS) data and both Tom Moultrie and Rob Dorrington have provided support in considering a number of the aspects around the demographic projection. EPRI manipulation of GHS data has proved invaluable. Comments from the Department of Social Development and their advisors have been very helpful. Alex van den Heever is singled out in this regard, together with Wim Franssen of the ISSA and Tineke de Jonge of the SVB in the Netherlands. Finally, insights provided by members of the National Treasury team and international invitees to the workshop co-ordinated by the inter-ministerial task team in May 2007 are gratefully acknowledged.

The responsibility for errors remains mine.

2. METHODOLOGY

Two models are used to evaluate the system-design options available to policymakers. The first is a financial projection of the cash flows of entire system. It combines a long-term demographic projection with a number of financial parameters,

[5] The international literature includes Barr (2006), Demarco et al. (1998), Gill et al. (2003), Mackenzie (2006), Orszag and Stiglitz (1999) and the World Bank (2005). South African material includes Department of Social Development (2007), National Treasury (2004 & 2007) and Taylor (2002).

in order to test the national impact of each design candidate. The second is a simulation of individual outcomes to determine how participants are affected by the design alternatives. This part of the analysis helps policymakers to understand two different aspects of personal retirement prosperity:

- the replacement ratio, the expected pension relative to earnings before retirement, and
- the redistributive effect, the extent to which the poor receive higher proportional benefit than the wealthy.

The methodology behind the modelling is explained in this section, which should be considered in conjunction with the discussion on the modelling assumptions set out in Appendix 1.

2.1 Long-term projection

This model provides a 75-year financial projection of each possible set of benefits. Chart 1 illustrates the approach by showing the underlying driver of costs and benefits, the projected national population over the projected period, separately for males and females.

Implicit liabilities

Present value calculations would permit evaluation of the implicit liability of an unfunded system such as today's BSP. These have not been built in to the model, but can be calculated from the cash flows.

For example, the estimated implicit liability for the Social Old Age Grant (SOAG)

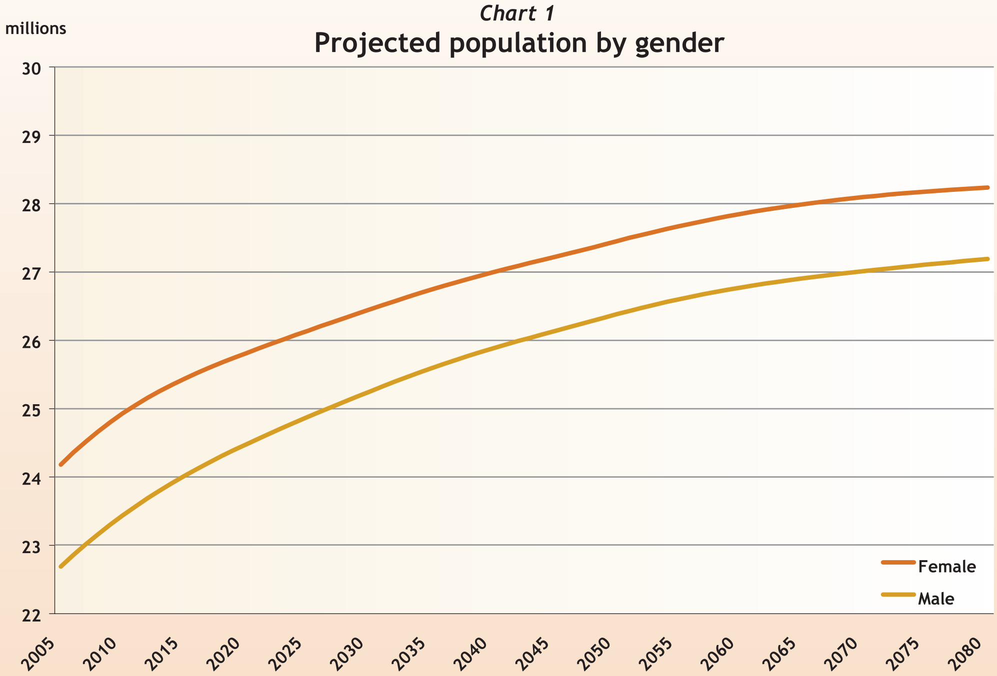
- starting in 2005 to be consistent with the rest of the model,
- assuming that payments increase annually at a rate of 1% above the inflation rate,
- discounting future payments to the present at a rate of 3% above inflation, and
- taking into account only the next 75 years of payments, in line with convention in the United States for measuring social security liability (Diamond & Orszag 2002; Sass 2003)

is between R1 800bn and R1 850bn, around 125% of GDP.[6]

Calculations like these should become a standard part of assessing any social security or social assistance programme.

Chart 1

Projected population by gender



Standard outputs

The focus of outputs in this document is on total income and total outflow from the system, across the population as a whole. The model permits more detailed analysis of a number of the system components and allows drilling down by gender, by educational group and any combination of these. It also gives the option to monitor the progress of any age or age group.

The standard form of outputs in this paper is the Rand amount of income and outgo in constant 2005 Rand terms. There are a number of alternatives to this as well, for example percentage of earned income and percentage of gross domestic product. These are easily computed for more detailed analysis of the system.

2.2 Personal simulation

The individual model computes expected retirement benefits as a proportion of earnings just prior to retirement, the so-called replacement ratio, which is a standard measure of post-retirement prosperity. The charts in this paper show the replacement ratio at different income levels in order to demonstrate the redistributive qualities of each combination of benefits.[7]

Chart 2 provides an example of this simulation and demonstrates how the three components, the Basic State Pension (BSP), and Defined Benefit (DB) plan and the Defined

[6] Taking into account the payment in perpetuity rather than considering only the next 75 years adds around R400bn, or a little over 25% of 2005 GDP, to this figure. These proportions are quite high by global standards.

[7] Despite its use as a standard measure, the replacement ratio suffers disadvantages, the most important of which is the set of assumptions used to calculate it. The theme runs through this paper.

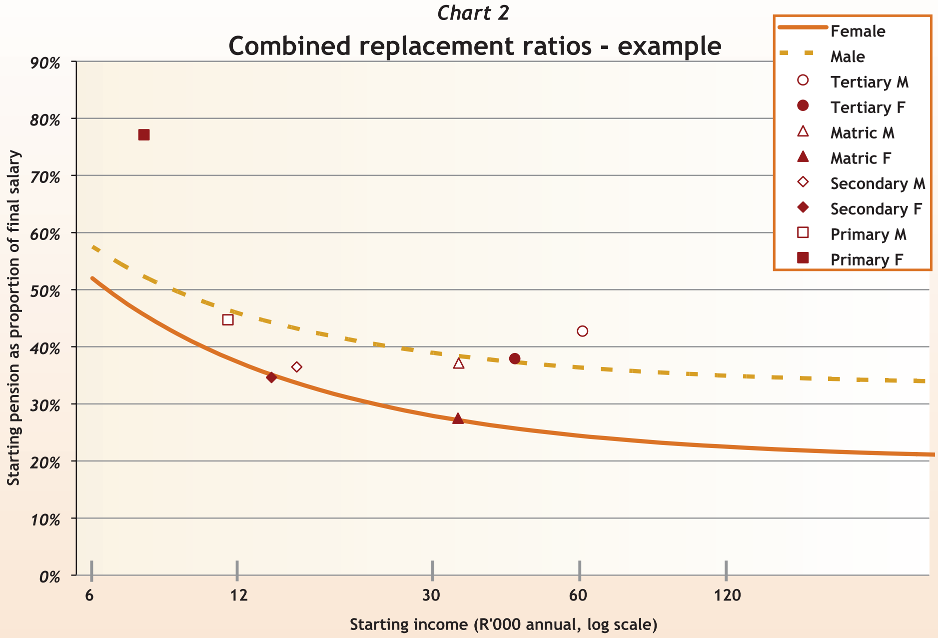
Contribution (DC) plan, combine in this instance to give the overall shape of the curve. The scales used for the smaller charts are the same as for the main chart. FAP benefits are included, where relevant, with their BSP counterparts.

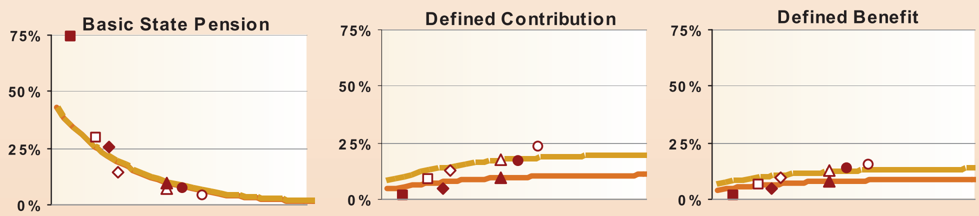
The curves show, separately for men and women, the expected replacement ratio for a specified set of benefits across the income spectrum. The curves are useful to give a broad sense of the main beneficiaries of each design option but the calculations behind them make a number of simplifying assumptions. The most important of these is that all of those individuals represented by points on the curve experience the same pattern of earnings growth over the course of their careers. This is unrealistic, because analysis of the data shows that those in lower socio-economic classes tend to experience poorer career-average salary increases.

The dark triangle represents a female with a matric education, an example citizen followed throughout this paper. She starts her career earning around R30 000 annually and her earnings progress to a peak of around R150 000 toward retirement. Chart 2, which is an illustrative example only, shows that she is expected to receive a total annual pension of approximately R45 000, around 30% of her final salary. The smaller images suggest that she is expected to receive benefit in roughly equal measure from the three system components.

A fundamental weakness of the personal simulation is the difficulty of estimating the probability of employment. Full employment is assumed for projection purposes because sensible alternatives are difficult to develop, but the discussion of the preferred system design includes a projection based on the assumption that today's employment rates continue into the future.[10]

Chart 2





The eight points added in blue provide member-specific calculations that correspond to the fitted career salary progressions of the eight combinations of gender and education status forming an integral part of the model.[8] These points are more scattered across the chart because they utilize age-dependent salary-growth assumptions that are specific to that combination of gender and education status. Differences in the assumed rates of salary growth produce differences in the projected replacement ratios, hence the scatter.[9]

Another weakness of this charting approach is that it does not indicate the range of uncertainty of outcomes around the best estimate – that is, it is deterministic in approach, not stochastic. This simplifies presentation but makes assessment of the relative merits of DB and DC difficult. Each model presents a different set of risks and a single-outcome approach cannot indicate this subtle distinction between them. The issue is discussed in more detail with each of the design options.

[8] Appendix 1 shows the career salary curves for each of these eight model points.

[9] All else being equal, the lower the career-average salary growth the higher the replacement ratio. This is because the benefit immediately after retirement represents a higher proportion of final salary thanks to the poorer rate of salary growth during the working years. This does not mean that the individual is better off, and signals one of the weaknesses of the replacement ratio measure.

[10] The employment rates are smoothed age-based curves separately for educational status and gender and are illustrated in Chart A3 in the appendix.

3. BUILDING BLOCKS

The purpose of this section is to introduce the candidate components of the system. Each has distinct qualities that are rarely sufficient, taken alone, to meet a broad range of objectives, but each could form a useful component of a system that dovetails the qualities of many parts. This section describes the respective characteristics of each component in the context of the system as a whole and from the point of view of individual members.

3.1 Basic State Pension

The proposed BSP is a monthly transfer to all citizens without means-testing. The starting level is the same as for today's Social Old Age Grant (SOAG).[11] Two significant modifications are anticipated:

- **The means test is removed,** making all elderly citizens eligible to receive benefits. Relative to alternative approaches that retain some form of eligibility criteria apart from age, this increases the outflow.
- **A clear policy commitment to year-to-year increases is adopted.** The model assumes increases of 1% above inflation, the outcome of a recommended mix of price and wage increases. The reasoning behind this proposal is discussed in more detail below.

Two other assumptions are set out explicitly below, even though they involve no change to the SOAG as it currently exists:

- **The age of eligibility continues to be 60 for women and 65 for men**. The chart below shows the cost-reducing impact of equalizing the retirement age for men and women at 65, but it is considered inappropriate in today's uncertainty to assume any scenario different to the present system.[12]
- **The cost of the current SOAG with proposed annual increases is met from general tax revenue** and this is to continue indefinitely. From a modelling perspective, each element of the system must be self-funding and it is not considered appropriate to add to social security contributions by requiring them to take on the additional burden of covering the cost of the SOAG, or its successor, the BSP.[13]

Increases to the BSP

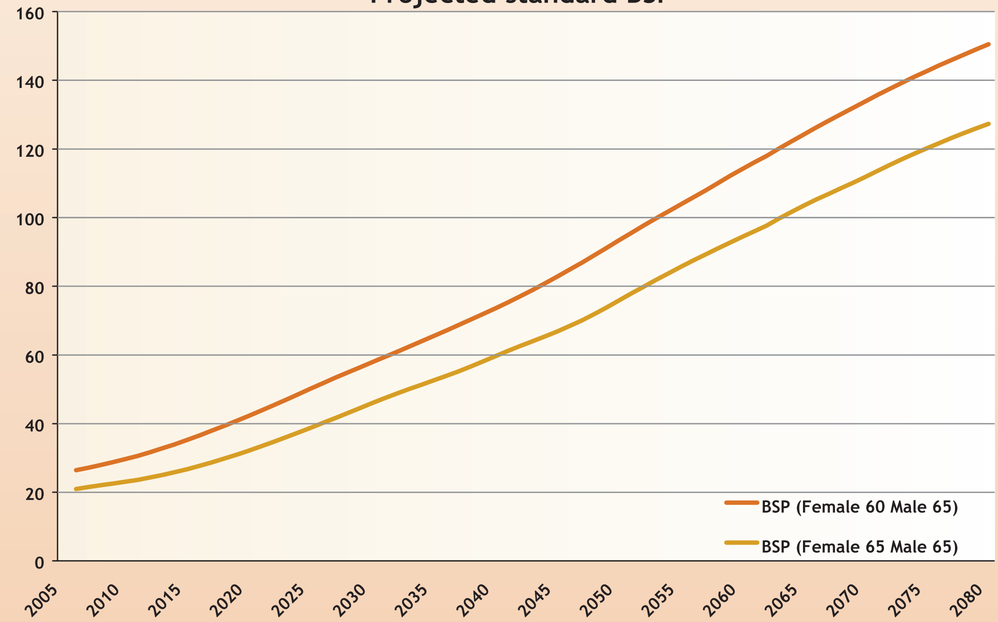
If policymakers are to commit annual increases to the BSP benefit level, at what level should these increases be pegged? The answer would seem to lie somewhere between a price-inflation measure and its wage-inflation counterpart, as demonstrated by the reasoning that follows.[14] Suppose that individuals receive a benefit that starts at a specified level and that then increases at a specified rate. The starting level must itself increase over time. Consider separating these rates of increase.

- **Increases in payment.** Price inflation forms a natural benchmark for the appropriate rate of growth to the grant once the recipients have started drawing it. This is because their expenses are likely to grow at this rate.[15]
- **Increases to the starting level.** On the other hand, there is a case to increase the level of the starting benefit at a rate more akin to wage inflation. First-time recipients are theoretically leaving the job market and might reasonably expect a benefit that keeps up with some wage index.

Of course, different growth rates are not possible, since the BSP pays the same benefit to all elderly South Africans, whether first-time recipients or long-standing pensioners. It is proposed that the policy of increases should be based on the average of price inflation and wage inflation, a compromise that might be

Chart 3

Projected standard BSP



[11] The initial payment level is R800 monthly in 2005 terms, very close to today's R870.

[12] Some suggest that the current system gives women two advantages. Women live longer than their male counterparts, on average, so are expected to receive benefits until later in their lives. On top of that, they start earlier. These suggestions of gender inequity need to be put into a wider context. Women experience a number of systemic disadvantages in the way that society treats them. They often take on unrewarded care-giver responsibilities, for example, and they often take greater steps to distribute old-age grants to members of the extended family (Dulko 2003). The current SOAG system may go some way to compensating women for these disadvantages.

[13] The cost of covering the SOAG through an employment-based contribution is approximately 7% of qualifying earnings – that is, annual income above R12 000.

[14] Wage inflation is usually higher than price inflation as labour shares some of the benefit of economic growth, though this is not evenly distributed. As is evident from analysis of income levels by education, the wealthy often enjoy higher rates of growth than their lower-income counterparts. This model assumes underlying wage growth of 2% real against GDP growth of 3.5%.

regarded as too low for first-time recipients and unnecessarily high for those in receipt of payment. For modelling purposes, based on assumed wage inflation of 2% above the rate of price inflation, this suggests increases to the basic state pension of 1% real.[16]

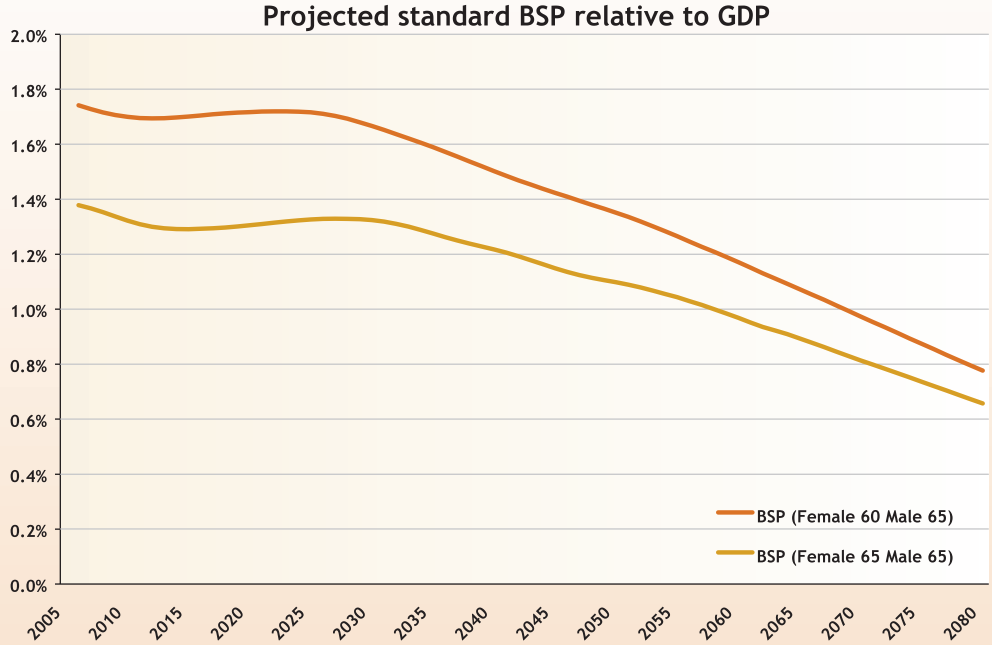
Cost of the BSP

Chart 3 shows the expected cost of the BSP in constant 2005 Rand terms together with the impact of an immediate equalization of the age at which payment commences at 65 for males and females.

The expected increases in constant Rand terms look substantial, but plotted against GDP (Chart 4) are shown to be a decreasing burden on the economy. Note that this outlook is very sensitive to modelling assumptions, the crucial numbers being the expected growth in wages and the corresponding growth in real GDP.[17]

Chart 4

Projected standard BSP relative to GDP



3.2 Flat Accrued Pension

National Treasury has suggested a wage subsidy at low-income levels, payable to employers to cover the cost of the mandatory social security contribution and encourage job creation.

An alternative to this is to provide a pension benefit based solely on employment. This would act as an incentive to seek formal-sector employment and would go some way to compensating formally employed low-income workers poorly treated under the occupational-fund dispensation towards the end of the apartheid era. This is difficult to model, because it depends on the development of sound statistical distributions of the number of years worked over a career, split into income bands.[18]

It also suffers the disadvantages, either

- in the event of it being based on a relatively low threshold of years at work, practically indistinguishable from the BSP; or
- if it is dependent on a high years-of-work threshold, systematically disadvantaging poor South Africans unable to find work over a sufficiently long period to attain the threshold.

Any threshold also creates an incentive to attain the required years of work and then, on reaching the standard, to find ways to avoid continued participation.

An alternative is to establish a pension that is accrued at a constant rate, encouraging formal employment through a reward received in retirement. Constant accrual has the quality of linking the incidence of contributions rather better to the benefits, but with the redistributive quality that contributions are salary-based and benefits flat.

[15] Discussion of whether the inflation rate should be modified to reflect the typical basket of goods of the poor elderly is important but beyond the scope of this paper.

[16] South Africa does not have a reliable set of wage-rate indicators, on which practical implementation of this recommendation would depend. It is stressed that the recommendation is not a 1% real increase but an increase that philosophically appeals to both price and wage indices in the ratio 50/50.

[17] Wages are assumed to grow at 2% real and the BSP benefit at half of this. GDP is expected to grow at 3.5% real, which explains the expected decrease in payments as a proportion of GDP. A smaller difference between wage growth and GDP growth would reduce the rate of decline shown in Chart 4.

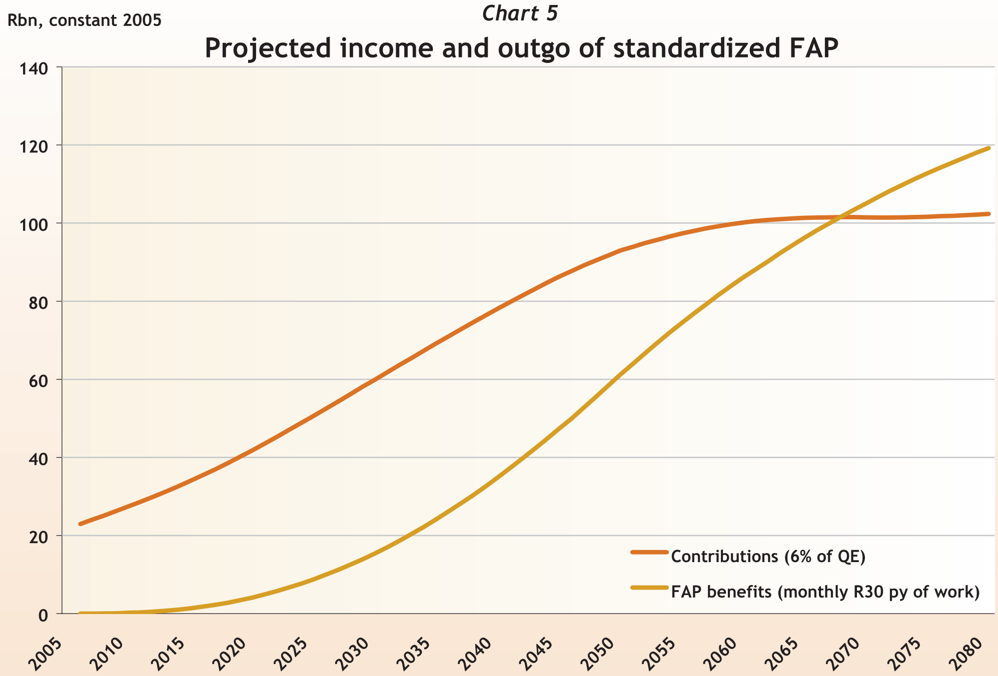
[18] Determining an average working career is possible, though difficult amidst wide societal inequity and changing socio-economic conditions. Much more challenging is establishing the statistical distribution around this mean, particularly for different socio-economic groups.

Costs and benefits

Chart 5 sets out the projected income and outflow from an FAP system under which benefits are R30 monthly for each working year and contributions are 6% of qualifying earnings.[19] Contributions are more than sufficient to meet the cost of benefits for some time, but the growing burden of the accrual would overwhelm the contribution inflow some 60 years or so after system launch if no adjustments are made. Though reserves would have been built up during that period, these would deteriorate rapidly from that time onward.

The most important adjustment to make to benefits to prevent this type of deterioration is to introduce, at the time of launching the system, an automatic adjustment to the retirement age of, say, 1 month a year, in order to allow for increasing longevity of participants. This is a point repeated in other parts of this paper.

Chart 5



3.3 Defined Benefit

DB arrangements are not straightforward to run and have a number of pitfalls, as demonstrated by the global attention given to employer risks and, closer to home, by the recently promulgated surplus legislation.[20] The crux of the difficulty is that the sponsor bears the risk of financial distress. While this is the root of many of the difficulties, it is also the key to the benefit to participants of a DB arrangement.[21]

This paper urges consideration of a DB component to the national social security scheme, arguing that, in combination with the other parts of the system, a DB component provides excellent protection against risks that are difficult for individuals to defend against. The most obvious risks of these are investment volatility and the exposure to market conditions at the time of converting accumulated savings into an annuity. The latter is particularly difficult to protect against because, while the investment component of annuity pricing can be hedged, there is very little that can be done about the mortality component of this pricing: annuitants are at the mercy of the annuity providers, themselves anxious to protect against long-term risk.

Since a DB arrangement leaves risk in the hands of the institution – the government in this case – it is appropriate to identify these risks and suggest broad approaches to mitigation.

- If the sponsor holds funds against the promise of future benefits, it must ensure that the net investment return on these funds is sufficiently high to meet the obligations. In this case, the return on investments is one of the key risks.
- If liabilities are not prefunded, the greatest risk to the sponsor is demographic, the possibility that the ratio of aged recipients to working contributors – the dependency ratio – grows more rapidly than anticipated, creating a liability that cannot be met without drastic steps being taken.

[19] Consistent with the corresponding approach for the BSP, benefits are projected to increase at an annual 1% above the rate of inflation.

[20] The Pension Funds Second Amendment Act set out to redress the poor treatment of members by establishing a set of minimum benefits and requiring funds to put in place processes to redress former members who received less than these minimum benefits when they left the fund.

[21] Another difficulty of the DB system is the absence of portability. Individuals cannot easily buy out their accrued benefits and take them to another country. This is a characteristic that it shares with the BSP and FAP, and is not on its own sufficient to rule it out as part of the benefit design.

The author's preference is to back system liabilities with assets and to establish management structures that ensure that these funds are invested with the best interests of participants in mind, which means selecting investments appropriately, keeping costs low, and avoiding conflicts of interest.

Full funding – ensuring that asset value always exceeds the corresponding value of liabilities – may be inappropriately conservative because it ties up significant assets, but funding benchmarks must be established at outsets with actions to be taken should they be breached. For this purpose, 90% of liabilities might be regarded as an acceptable minimum value of assets, with actuarial valuations implemented every two years, say, and an action plan for recovery within four years put in motion should the asset value drop to below this level.[22] The valuations must also provide the means to evaluate trends and implement long-term plans in response to these trends. Interim reports every year would be appropriate.[23]

Costs and benefits

Chart 6 sets out the project income and outflow for a potential defined benefit system. Participants accrue benefits at the rate of 0.75% for each year of work. The formula used to determine the starting level of benefits is thus

> 0.75% X years of work X inflation-adjusted average qualifying earnings

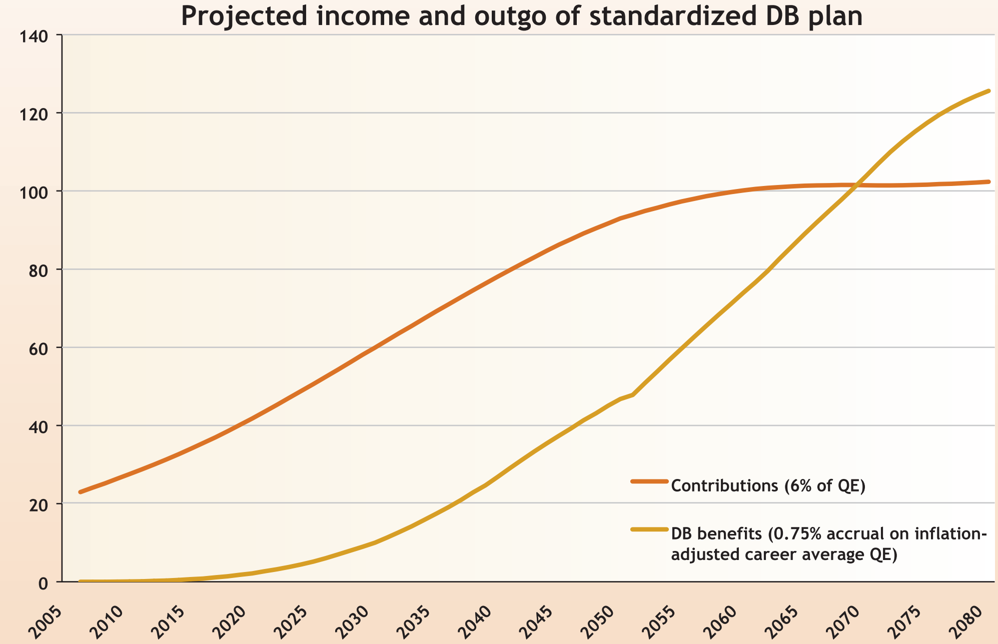
Benefits are assumed to increase at the rate of inflation during payment. The assumed rate of contribution is 6% of qualifying earnings.

As for the FAP benefit, the system is expected to accumulate significant assets for a number of decades and then, in the absence of any changes to benefits or contributions, to draw rapidly down on these funds, eventually exhausting the available reserves. Again, the best defence against this is a retirement age that adjusts to reflect the balance of contributors and recipients. At system design stage, the retirement age should be set to increase gradually over time.

Further protection against deterioration of the system could be built in by establishing in the rules the freedom for policymakers or independent assessors to make additional changes (1) to benefit levels, (2) to the increases to benefits or (3) to the age at which they are first received, preferably the last of these.

Chart 6

Projected income and outgo of standardized DB plan



[22] The corresponding threshold funding levels for employment-based arrangements are usually higher than this, in some countries above 100%, but that is because there is always the risk that the employer might close, cutting off the sponsoring source. The same is not true in the case of a national arrangement, though an appropriate set of safeguards must still be built into the system.

[23] Among the governance requirements should be appropriate safeguards to protect against the possibility that the South African government uses the fund as a captive borrower.

3.4 Defined Contribution

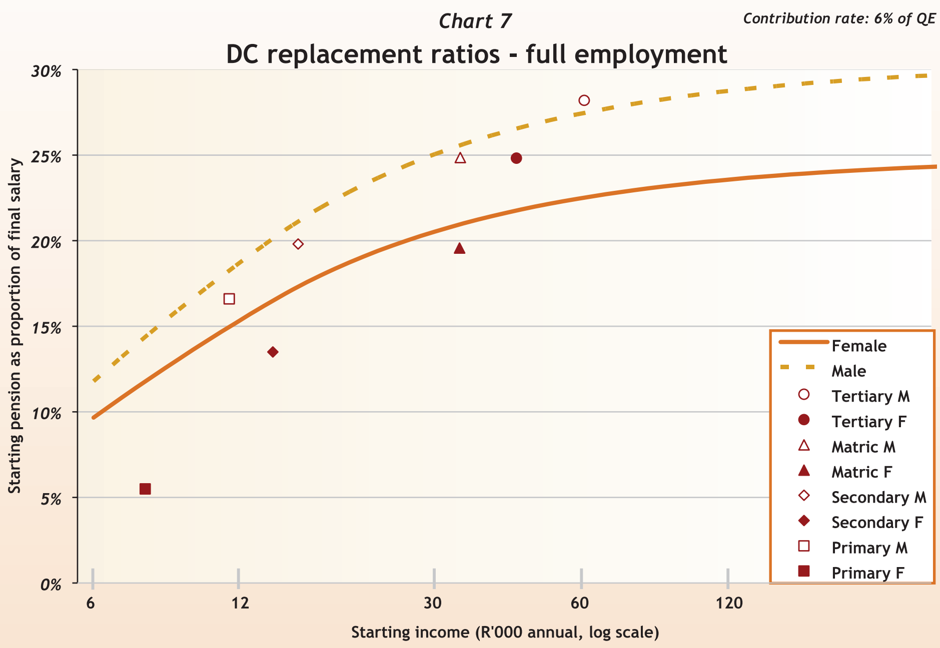
DC arrangements are, by definition, fully funded, since benefits are given by the accumulation of savings of each participant. The member of the fund retains the risks of poor investment performance and the possibility of expensive annuity purchase referred to in section 3.3, though both may be mitigated through appropriate investment of accumulated funds.

While members take on significant risk, they also gain the potential for high returns, often significantly higher than the internal rate of return gained in equivalent defined benefit arrangements. The DC component thus provides participants with advantages and disadvantages that complement the corresponding pros and cons of the DB counterpart. In conjunction these two systems give a mix of benefits that offers reasonable protection against uncertainty combined with good up-side potential.[24]

This paper proposes that contributions be based on qualifying income, removing the need for very low-paid South Africans to contribute, but also denying them the opportunity to accumulate benefits, except through voluntary additional arrangements. Charts 7 to 9 demonstrate the effect of the lower earnings limit by showing that projected replacement ratios fall as income declines: the replacement ratios are calculated on all income, while the contributions, and consequently also the benefits, are based only on income above the threshold.

This is characteristic of both the DB and DC parts of the system but is more than compensated for by the redistributive qualities of the BSP. Chart 2 in section 2 and the various scenarios set out in section 4 illustrate that the system as a whole subsidizes poorer participants.

Chart 7



The impacts of unemployment

This paper frequently stresses the sensitivity of projected replacement ratios to the assumed rates of employment. Chart 7 assumes full employment. Replacement ratios for a 6% contribution are reasonably high, in the range of 20% - 25% at median income.

Chart 8 assumes that today's employment rates are characteristic of the careers of all individuals.[25] The method is likely to understate replacement ratios, on the curves, at higher income, since the employment rates of high-income individuals is likely to be higher than the average. Unfortunately, the reverse applies as well: replacement ratios on the two curves are likely to overstate reality.

This is quite clearly evident from the positioning of the eight points, which use a more realistic estimate of employment rates for gender and education combinations (refer to the legend on Chart 7). Lower-paid workers are likely to fare much worse than their higher-paid counterparts because they are less likely to work a high proportion of the available working years. Women are likely to be particularly hard hit. The example of a typical woman with a matric education illustrates this: her pension is expected to be 20% of her final salary if she works a full career (dark triangle on Chart 7) but only 10% if she works in line with the employment rate of today's females with matric education (Chart 8).

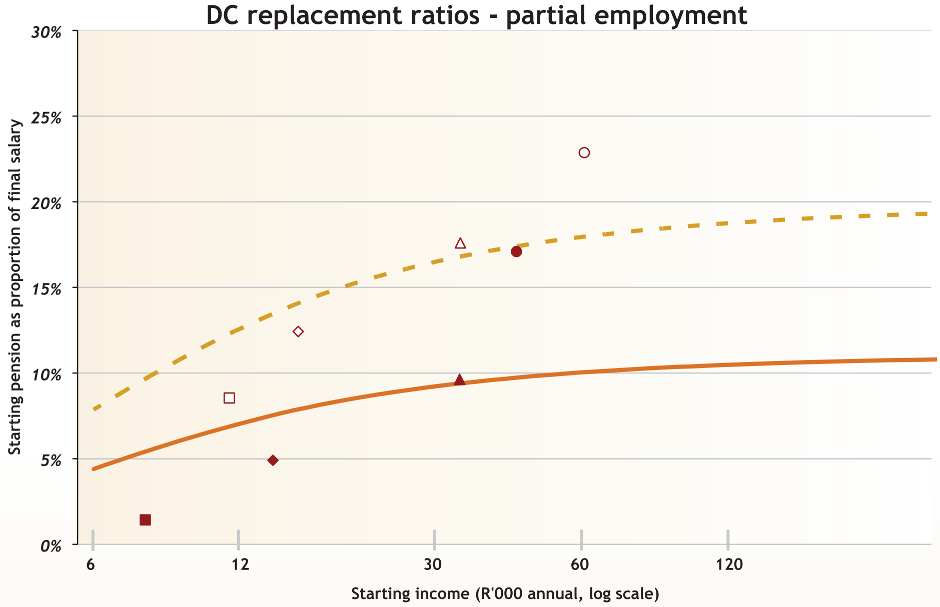
[24] The management of the defined-contribution part of the system requires considerable care if it is to operate efficiently and safely. The details of the system are not within the scope of this paper, but are considered in the paper discussing the accreditation of providers, which forms part of the same Department of Social Development research programme.

[25] Technically, it applies today's probabilities of employment as weights to the accumulated income, assuming that the aggregate saving experience of the group as a whole applies to each of its members.

Chart 8

Contribution rate: 6% of QE

DC replacement ratios - partial employment



Comparison of these charts illustrates the impact of employment rates. In particular, it shows how women, who work less than men, accumulate less in retirement saving and experience a lower replacement ratio.

Comparison with current saving patterns

Chart 9 shows the replacement ratio expected from today's defined contribution system, assuming a total annual charge of 2.5% of assets. Actual charges vary considerably, but this is a reasonable estimate of the average charge for a long-term individual saving contract on a Total Expense Ratio basis.[26]

The Basic State Pension is ignored, so the replacement ratio shows private sector saving only, making comparison of this chart with Chart 7 only appropriate at middle- and higher-income levels. The contribution rate of 6% is selected to provide consistency of comparison, and it applies again only to qualifying income.

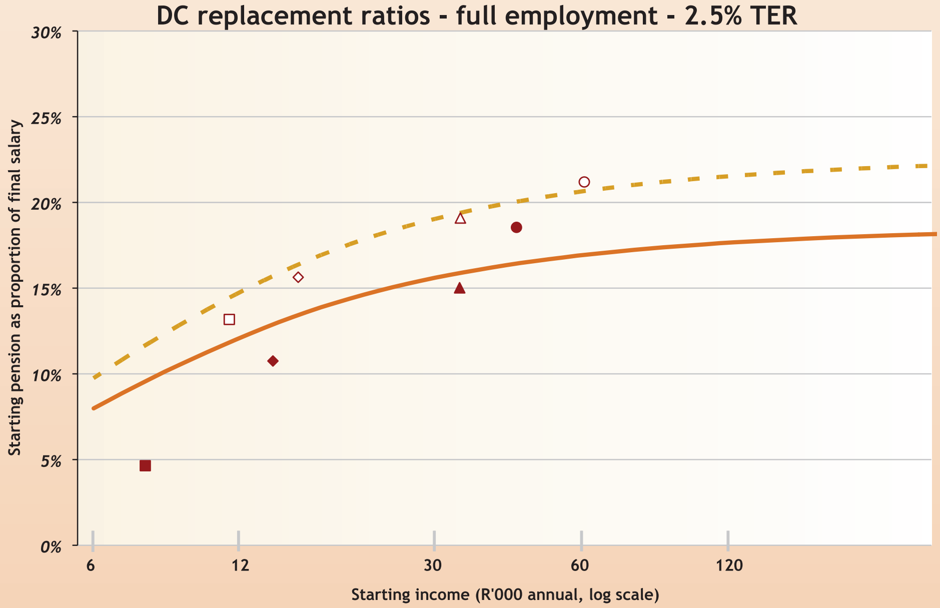
Figures are considerably lower than under the corresponding scenario for the new system in which a Total Expense Ratio of 1% of assets is assumed. For example, the replacement ratio for the point representing a typical male with a tertiary education has fallen from 28% to 21%. A typical female with a matric experiences a reduction in pension from 20% to 15%, in Rand terms from R30 000 a year to R22 500, a substantial reduction.

This provides an illustration of potential extent of the financial benefits that could arise from an intelligent redesign of the retirement system, with a sound focus on costs.

Chart 9

Contribution rate: 6% of QE

DC replacement ratios - full employment - 2.5% TER



[26] Rusconi (2004) quotes figures of up to 2.80%, but this assumes an uninterrupted and constantly increasing flow of premiums and it doesn't include the implicit charges that make up the difference between a total expense ratio figure and the reduction in yield alternative. On the other hand, we would expect members of groups like those working at large employers to experience lower charges than this. The 2.5% is considered an appropriate average, not a worst-case scenario.

4. MODELLING THE OPTIONS

Section 3 sets out the main characteristics of the building blocks. This section completes the process by demonstrating how they could be put together.

At a system level, each option, a combination of components, looks similar. This is deliberate because it facilitates comparison. All of the alternatives include:

- the BSP at current levels, with increases assumed at the average of price and wage inflation, funded from external sources;
- a DC system with contributions of 6% of qualifying earnings;
- a further contribution of 3% of qualifying earnings earmarked to meet death and disability benefits, themselves considered in a separate study; and,
- an additional contribution of 6% of qualifying earnings to meet the additional benefits considered in each alternative.

In each case, the total contribution is thus 15% and benefits consist of a flat state pension, death and disability benefits, a fund accumulation and an additional element. The separate additions considered in this analysis are:

1. an 80% enhancement to the BSP, roughly equivalent in value to the proposed FAP and DB alternatives, which means that it can be funded, at least for the next few decades, through the contribution of 6% of qualifying earnings;
2. the addition of an FAP paying a monthly benefit of R30 for each year of employment;
3. a DB benefit based on a 0.75% accrual of qualifying earnings for each working year; and
4. a combination blending the FAP and the DB benefits at half of the levels set out in options two and three.

System projections are illustrated with each of these options. The charts are, not surprisingly, similar to one another, since they are designed to be of approximately equivalent value.

The important analysis lies in the impact on members, as some options have significantly stronger properties of redistribution than their counterparts. Unless indicated otherwise, all replacement ratio calculations in this section are based on the assumption of full-career employment, to make comparison of the options clearer.[27]

4.1 Enhanced Basic State Pension

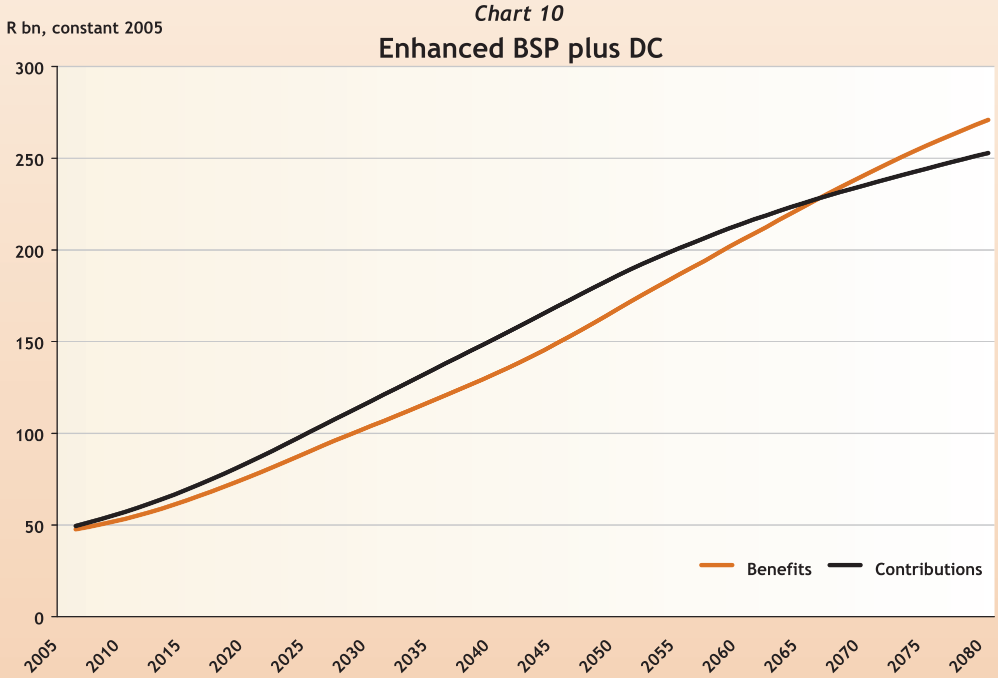
This approach simply extends the existing SOAG into a more comprehensive BSP, partially funded now by the contribution of 6% of qualifying earnings. The contribution is broadly sufficient to match the 80% increase in monthly payments.

Financial considerations

Income and benefits under this option track one another closely, though systemic adjustment to the retirement age in time would be required to keep the system financially sound. The gradual catch-up of contributions by benefits in Chart 10 illustrates the impact of the gradual deterioration to the dependency ratio[28] as the population ages.

Chart 10

Enhanced BSP plus DC



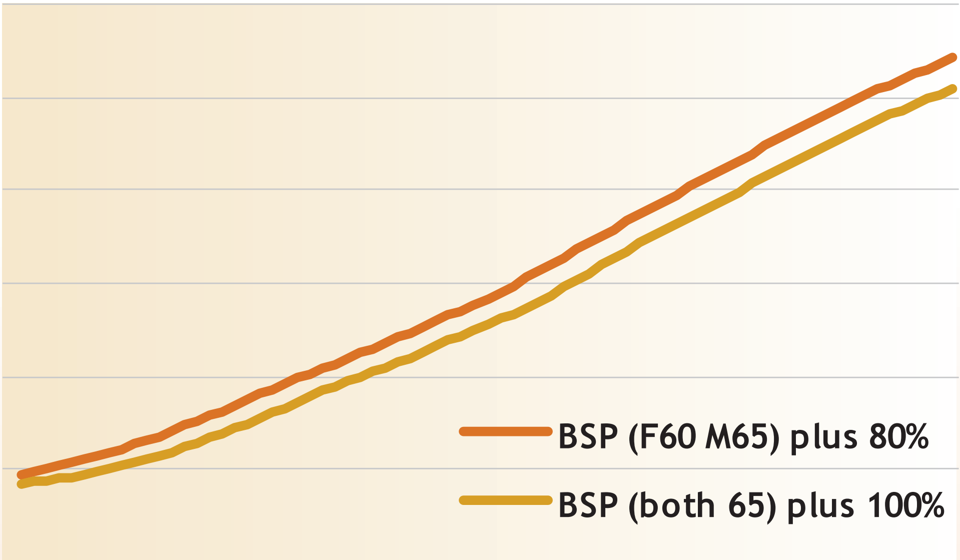
[27] An example of the impacts of shorter and interrupted working careers on retirement saving is given in the discussion of DC benefits, section 3.4 (compare Chart 8 with Chart 7), and another is presented with recommendations in section 5.1 (compare Chart 20 with Chart 17).

[28] The ratio of recipients to taxpayers.

Chart 11 illustrates the impact of equalizing retirement ages. It demonstrates that the increase to the BSP could be raised from 80% to 100% at no additional cost if the retirement age for women were raised to 65 with immediate effect. The lesson to draw from this example is not that this action should be taken – it would violate the expectations of South African women in their late fifties – but that retirement age is a strong driver of system cost.

Chart 11

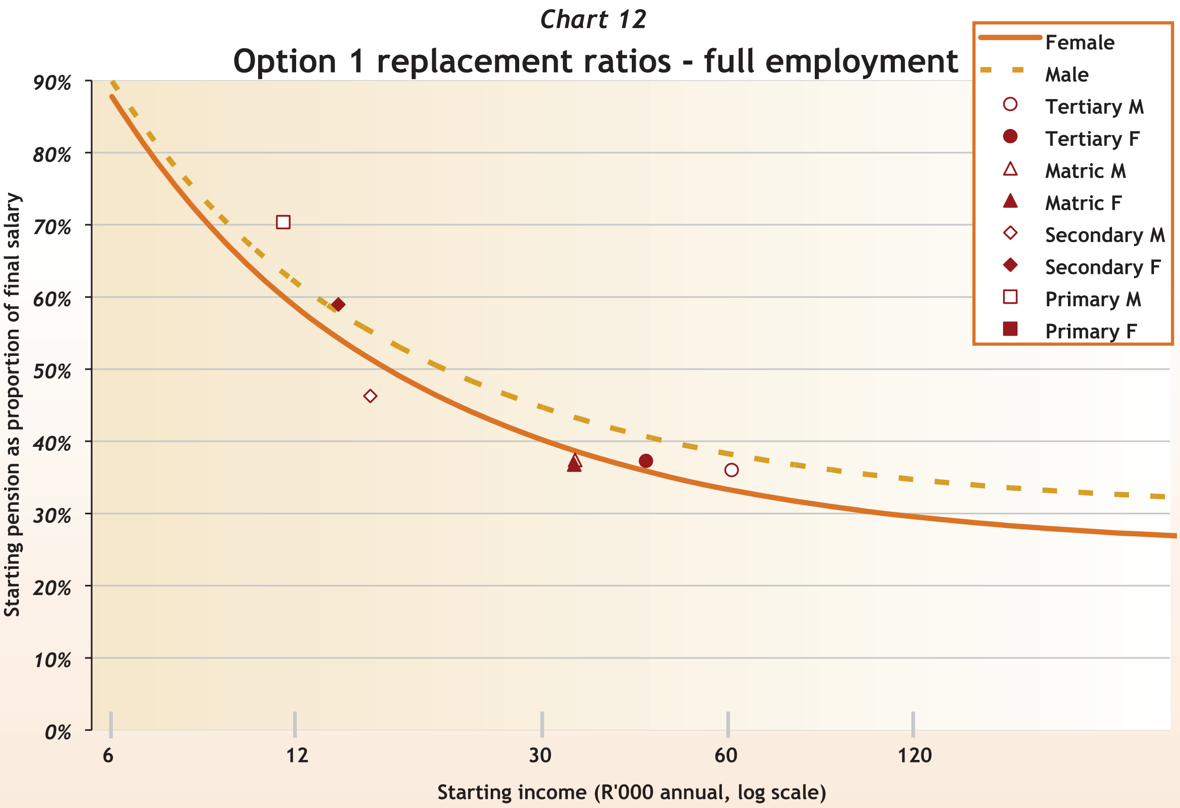
Comparison of BSP alternatives

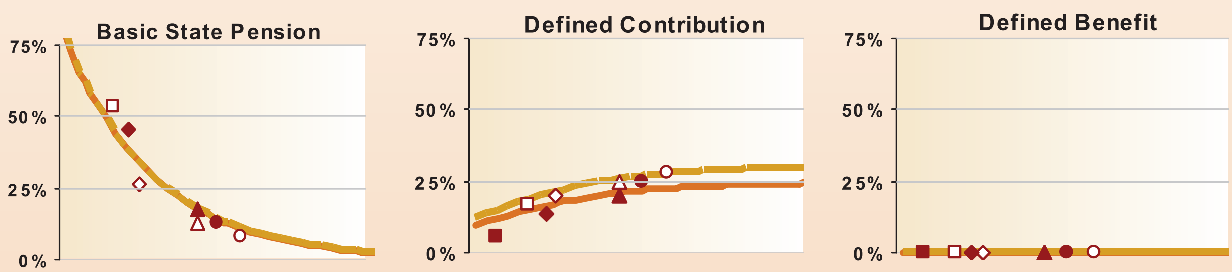


Participant considerations

This option adds 80% to the amount of the flat benefit. Relative to earnings it provides substantially more income to the poor than to the rich, so the replacement ratio is much higher at lower income levels (see Chart 12).[29] It explicitly redistributes towards the poor by

- levying contributions that are a percentage of qualifying income, but
- paying benefits that make no distinction by income level.





[29] A typical female with a matric education is expected to receive an annual pension of approximately R58 000, just under 40% of her final salary. Her counterpart with primary schooling or less is expected to receive approximately R28 000, well above her expected final salary of R20 000.

Policymakers would select this option above its alternatives if their primary objective is to provide considerably improved benefits to all citizens that would be most appreciated by the poor. Their main concerns with this approach would be the 6% social security tax levied on all employed people for which middle- and upper-income South Africans see no benefit of any real substance.

They would also be concerned about the demographic risks introduced by this approach, because

- the balance between inflows and outgo is heavily dependent on the ratio of recipients to contributors, and
- projections indicate little opportunity to build up protective reserves.

4.2 Basic State Pension plus Flat Accrual Pension

This approach adds to the BSP an additional payment that depends on employment history. South Africans with a registered history of employment could receive well over twice the pension benefit of their counterparts with no employment record.

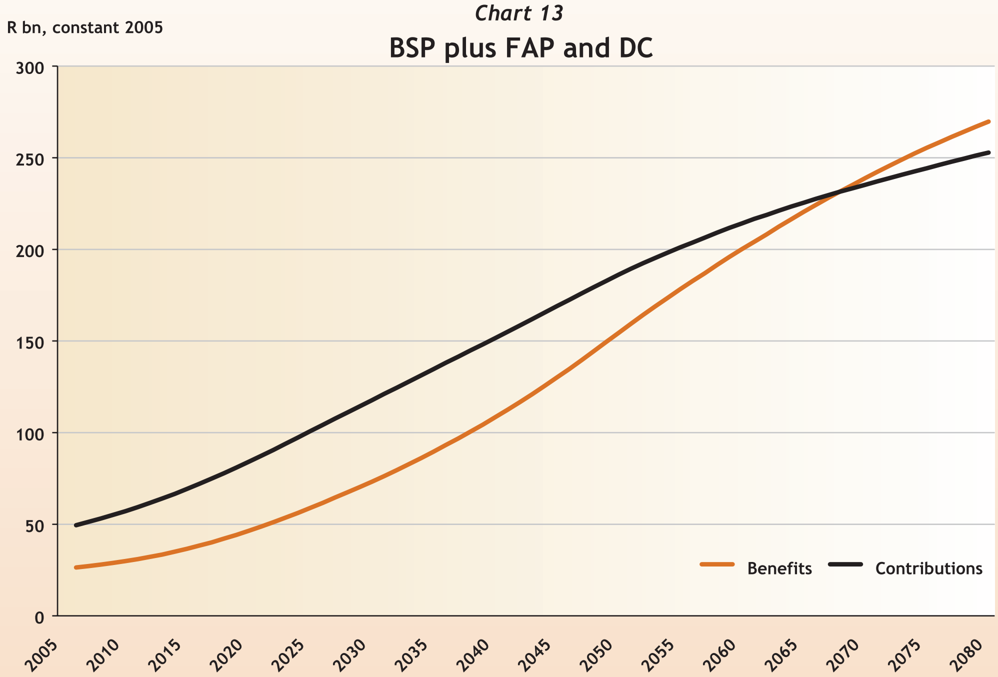
Financial considerations

Chart 13 shows the expected financial development of the system. Contributions are the same as under option 1. Benefits start out more slowly as the accrual of FAP benefits develops from zero upwards, the early retirees receiving the full BSP but only a small FAP payment from the limited opportunity to accrue benefits.

The system analysis allows for the employment pattern of participants, expected to improve due to the gradually increasing standards of education and associated lower rates of unemployment. This increases contributions in the short and medium term and benefits later on. Sensitivity to these factors would form an important part of any more detailed analysis of this option, as would consideration of steadily increasing the retirement age.

Chart 13

BSP plus FAP and DC

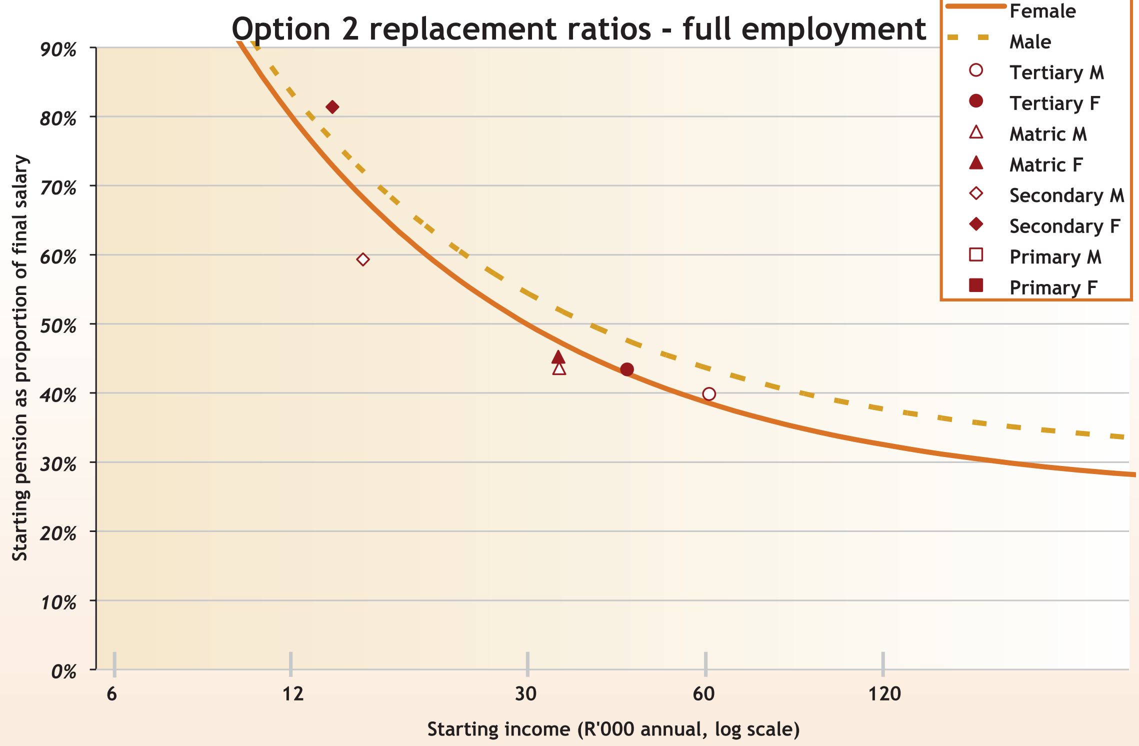


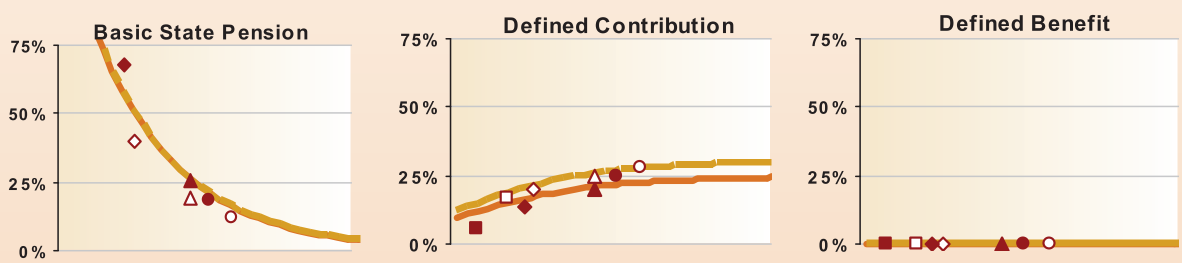
Participant considerations

The projection of individual benefit is very strongly dependent on assumed employment rates.[30] Chart 14 suggests very high replacement ratios at low levels of income, unlikely to be realized in practice for a high proportion of this group.[31]

More detailed analysis of this option must include careful consideration of the impact of lower employment persistency on benefits. An alternative to the constant-accrual design suggested here would be a smaller flat benefit based on the achievement of a certain number of years of employment, but this is difficult to model (refer to the discussion in section 3.3).

Chart 14





[30] Note that the benefits arising from the FAP component are included in the BSP curve.

[31] Our example matric-educated woman would be better off under this system than under option 1, ending with a pension of R71 000, 45% of final salary, but this depends on her working a full career. If she worked in line with the employment probabilities of today's female South Africans with a matric education, she would receive a pension of R55 500, only 35% of final salary.

4.3 The Defined Benefit–Defined Contribution Combination

The advantages and disadvantages of DB and DC arrangements are set out in the discussion of separate components in sections 0 and 0. A case is made there for combining the two components. The implications of this combination are considered in this section.

Financial considerations

Chart 15 shows the projected financial flows for the savings component[32] combination of a Basic State Pension with equal contributions to the DB and DC components. The contribution rate is selected to be sufficient to meet benefits for a number of years, but a system of automatic adjustment to the retirement age is strongly advised to promote system sustainability thereafter.

Chart 16 shows the expected build-up of funds from the DB portion alone, assuming net returns of 3.5%, which implies gross investment returns a little higher than GDP growth and well above wage growth. The chart demonstrates the significance of the build-up and the importance of setting clear rules concerning the required level of funding and the manner in which assets are to be invested.

Chart 15

BSP with DB and DC

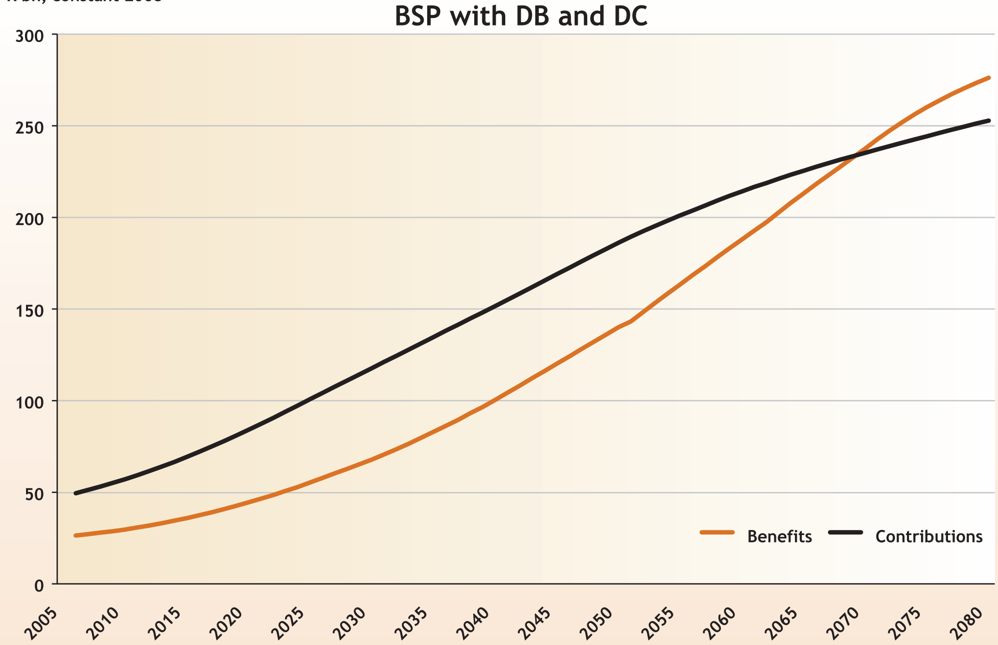
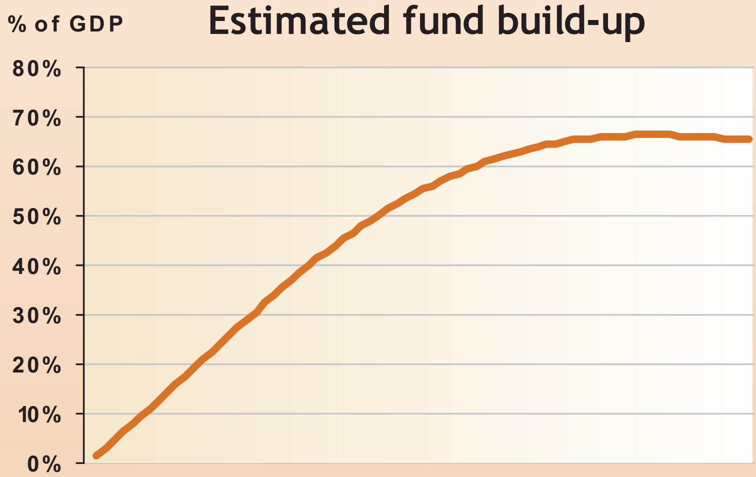


Chart 16

Estimated fund build-up



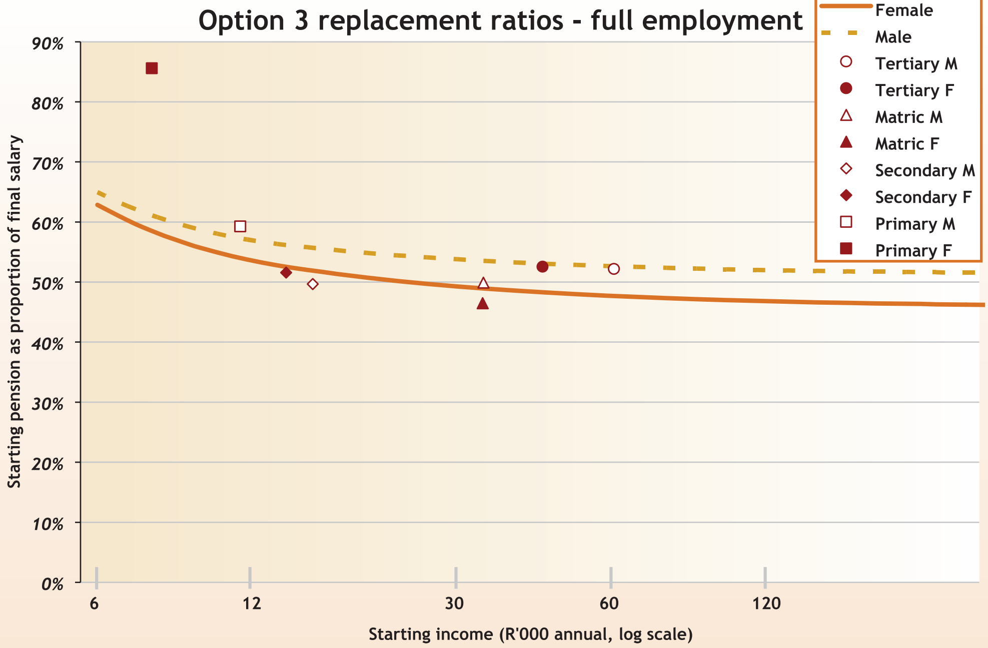
[32] Consistent with all charting in this paper, expected income and outgo from the provision of death and disability benefits are not included in the analysis. Survivor benefits form part of the next stage of development.

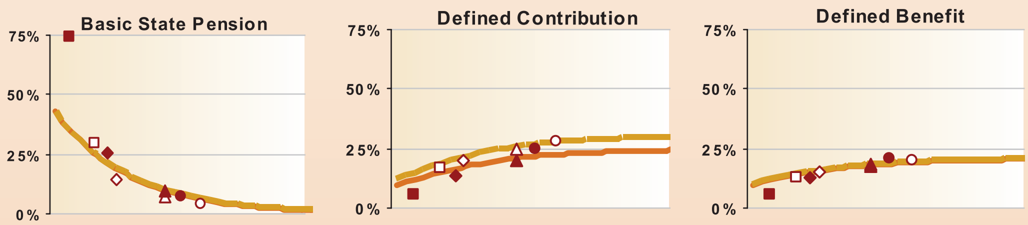
Participant considerations

Chart 17 shows how participants would view the arrangement. This mix of components is less redistributive than the alternatives because only the BSP portion pays a flat benefit. The DB and DC components are regressive in characteristic because they accrue benefits only for income above a certain level, but their impact on the overall shape of the curve is lower than the corresponding impact from the BSP.[33]

Redistribution is also better in the absence of the unrealistic assumption that participants all enjoy a full working career because the relative weighting of the DB and DC portions falls and the BSP comes into its own as a provider of minimum income in retirement. Chart 20 illustrates this.

Chart 17





Finally, the small charts illustrate one of the benefits to members of the risk borne by the institution in the DB component. In this component, men and women are treated identically at retirement because the institution bears the annuity risk. The gap between men and women on the DC chart reflects the differences in this treatment on annuity purchase.

[33] Our example case, a South African woman with a matric education, is expected to receive a pension of approximately R73 000, 46% of final salary, of which R15 000 is from the BSP, R31 000 from DC savings and R27 000 from the DB component. She would do better under this option than under any of the alternatives, but only if she worked a full career. If she were to work in line with the current employment patterns of her peers, the BSP would be the same, but the DC and DB payouts would fall to R15 000 and R13 000 only, giving her the 27.5% replacement ratio illustrated on Chart 20.

4.4 Pick and mix: An example

For completeness, a mixture of all components is illustrated. This takes half of the FAP benefit from option 2 and half of the DB benefit from option 3 and mixes it with the standard BSP and the 6% contribution to the DC arrangement.

Both the projection of system cash flow (Chart 18) and the calculation of replacement ratios (Chart 19) show an averaging of the characteristics of options 2 and 3. This permits relatively straightforward approximate assessment of other possible combinations, not considered further in this paper.

Chart 18

Combination of all options

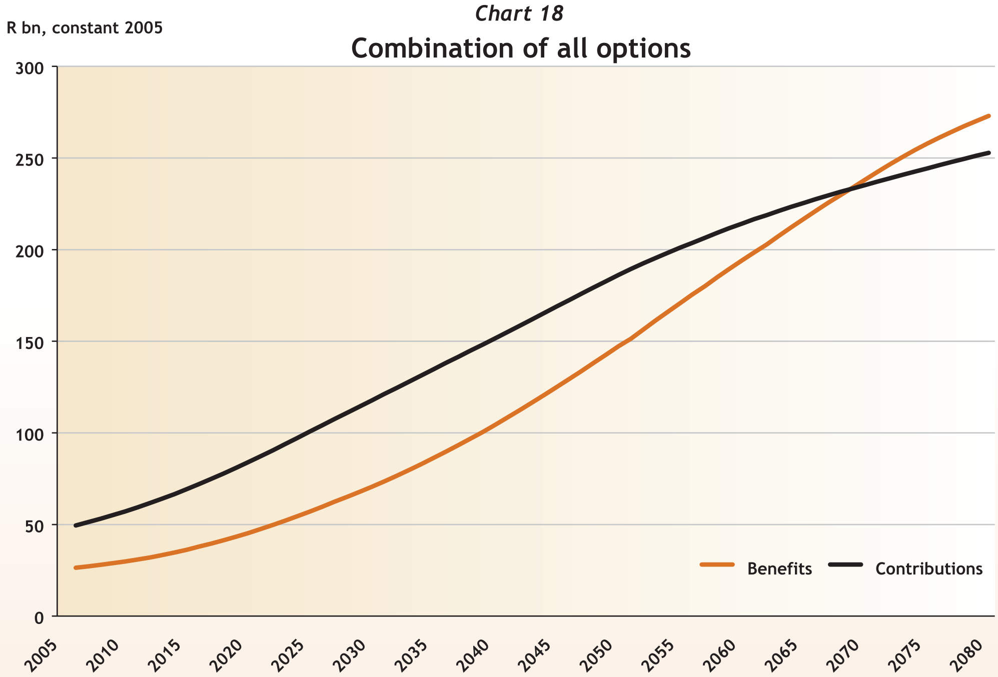
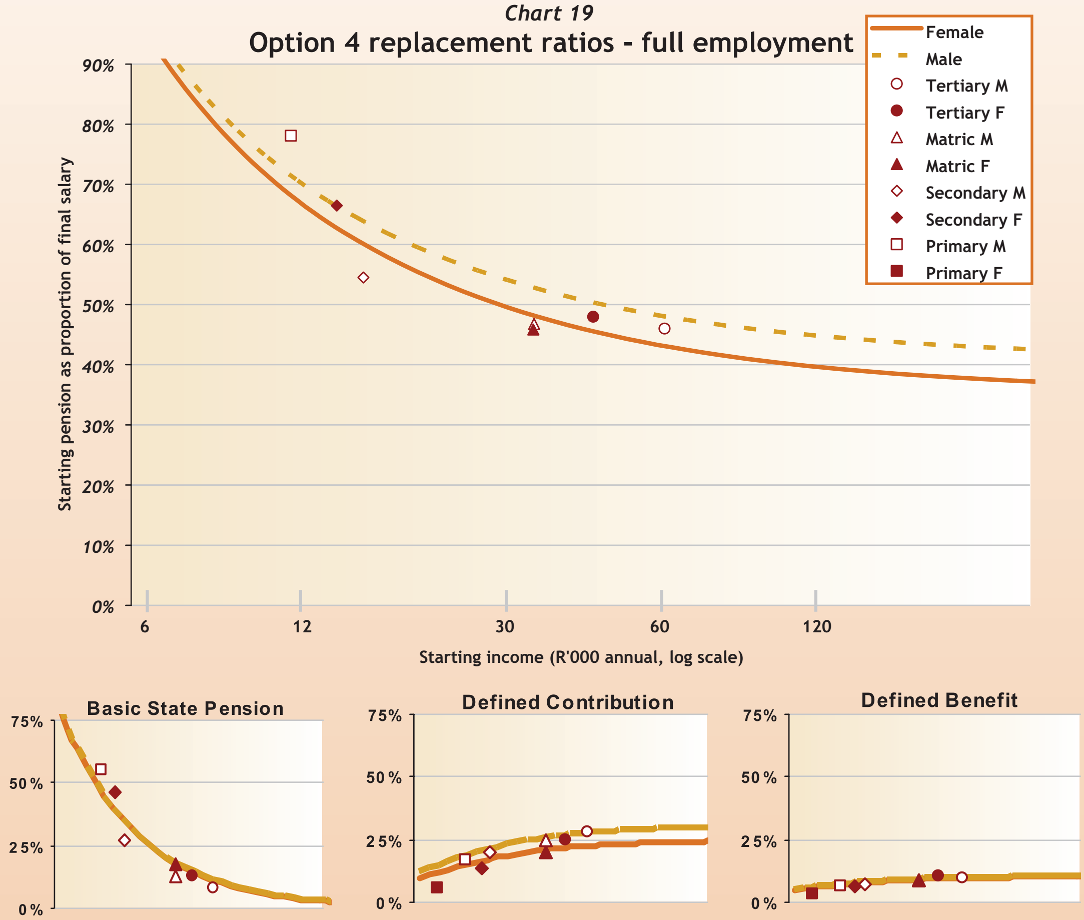


Chart 19

Option 4 replacement ratios - full employment



5. RECOMMENDATIONS

This section sets out a recommendation among candidate designs and considers the next steps in the process.

5.1 Thoughts on the options

What are the considerations that should lead thinking on design of the system? Three may be considered, with a number of sub-themes under each of these. The first considers the level of benefit, the second the shape of the benefit across socio-economic classes and the third invokes the goal of risk-reduction through diversification.

- **Target replacement rates.** The level of benefits for participants in a pension system might be expressed in a number of ways. Not only is the replacement rate merely one of these measures, but it is subject to the set of assumptions used to project the pension and final salary.[34] It is a good measure, but must be used with care.
- **Redistribution.** The shape of the replacement-rate curve reflects the extent to which low-income participants stand to benefit proportionally more than their wealthy counterparts. The extent to which redistribution is sought requires a balance between providing a minimum level of benefit to the poor and retaining sufficient financial benefit for the wealthy for this group to benefit from participating in the system.[35]
- **Risk diversification.** Mixing different systems provides some protection against the risks to which participants in a single-component design would be exposed.[36] This should be balanced against a pragmatic objective of scale within each component of the system, in the interests of cost management.

The recommendation set out below achieves this mix of objectives. Since there is no obvious best design, it is hoped that this recommendation provides a platform for objective discussion along the lines set out by these considerations.

Recommendation

Section 4 sets out a number of alternatives. Option 3 is recommended as providing an appropriate benchmark for further consideration and refinement. For the sale of completeness, the components of this option are set out below:

- A **Basic State Pension** at the current levels, R800 monthly in 2005 terms, increasing annually at the average of price and wage inflation, payable from age 60 to all resident women and from 65 to all resident men, with appropriate automatic increases to the retirement age.
- A **Defined Benefit** for each year of service of 0.75% of annual earnings above R12 000 (constant in 2005 money terms), supported by a contribution of 6% of earnings defined on the same basis, payable from age 65 to men and women, with appropriate automatic increases to the retirement age.
- A **Defined Contribution** accrual of 6% of annual earnings above R12 000, with benefits receivable from a recommended age 65, also increasing in line with price inflation.

Chart 20 shows the replacement ratios expected from this combination, based on today's employment rates. It should be compared with the corresponding full-employment projections in Chart 17.

The **Fixed Accrual Pension** is not recommended because it inappropriately benefits those fortunate enough to find employment. This could be reconsidered in an environment of higher rates of employment, where a higher proportion of those not working can be assumed to have chosen this option. Policymakers would find themselves under considerable pressure to provide accrual credit to certain groups unemployed under specific circumstances, the disabled for example, which could make financial control of the system more difficult and prone to political manipulation.

The broad rationale behind the other recommendations is that the BSP provides an excellent benefit and need not be substantially raised at this stage, but that formalizing the nature of the promise to citizens in terms of future increases would be extremely powerful. The provisional allocation to death and disability benefits is 3% of annual earnings above R12 000, giving a total contribution of 15% of qualifying earnings.[37]

That leaves the split between the DB and DC components as the sole remaining parameter. An equal split of retirement savings has been recommended, balancing equally the respective advantages of each component and retaining scale in each part of the system.[38]

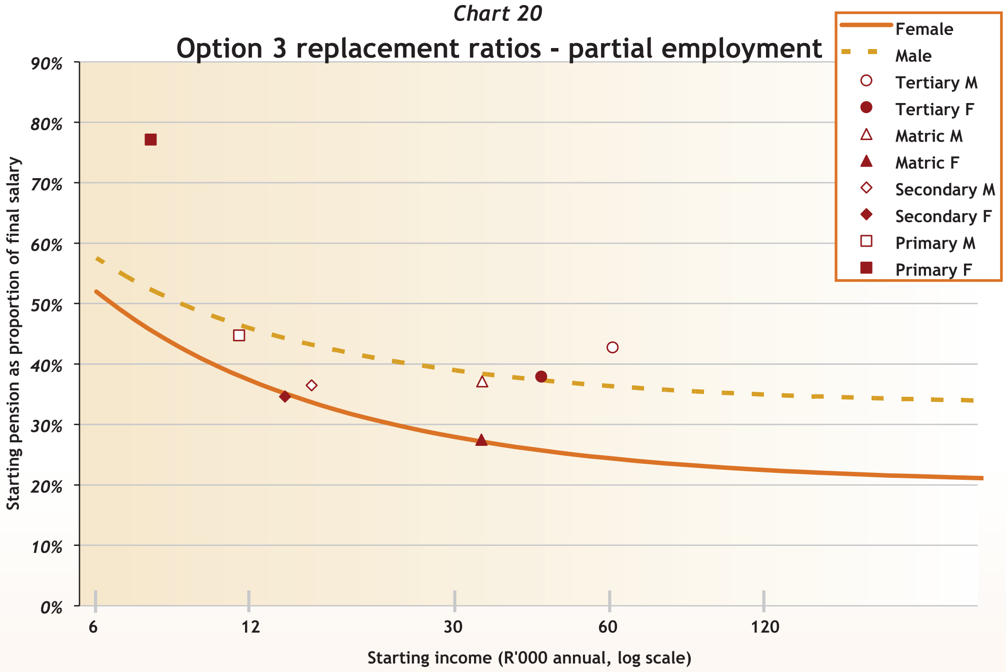
[34] The discussion of this paper has focused on the importance of the assumption on employment patterns but other assumptions also have substantial impacts on results. Refer to Chart 20 in this section. The vertical space between the position of the solid blue square and the red curve at the same salary level, a replacement ratio gap of 32 percentage points for two theoretical women with identical starting salary, reflects differences in employment rates but also salary progression over the course of a career.

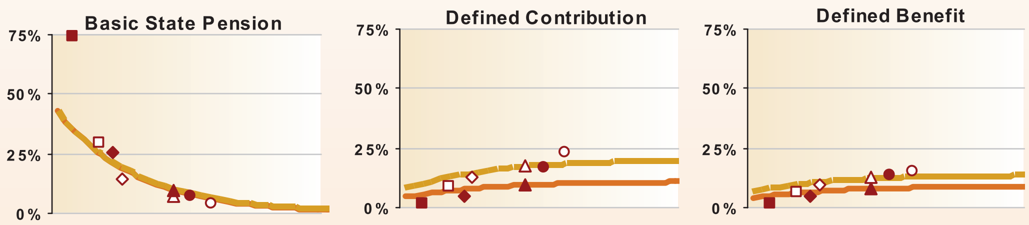
[35] Compulsion is not sufficient to ensure participation, and willing participation is certainly better than forced participation. The clear intention of policymakers is to reduce costs so that all participants receive substantial benefit from the new system, even if it comes at the cost of greater redistribution from the pockets of the wealthy. Refer to Charts 7 and 9 in section 0 for illustration of this improvement in the expected replacement ratios in the DC section.

[36] Section 0 provides brief discussion of the relative advantages of DB and DC designs.

[37] This recommendation may be modified on further investigation – part of the next phase of analysis.

Chart 20





5.2 Further work

This paper is a start. The system projection model is useful but can be refined further. The same thoughts apply to the recommendation. The list below sets out candidates for improvements to the process. The first of these has been scheduled for immediate commencement and all of the others must form part of the analysis in the near future.

- **Death and disability benefits** are to be modelled explicitly, testing the thesis that 3% of qualifying earnings is sufficient to provide reasonable levels of cover.
- **Benefit variations** should be considered. There is considerable scope for redistribution within the DB system. Contributions could be subject to a lower earnings limit that does not apply to benefits, for example, or benefits could be calculated with an earnings cap in mind.[39] An initial estimate of the appropriate rate at which to increase the retirement age should be determined.
- **Sensitivity testing** of results should be carried out to examine the extent to which the key finances of the system are exposed to external risks.
- **Real-world complexities** can be allowed for in the model. The wage subsidy is an example of this type of complexity. This could be considered against the alternative of a flat-rate contribution subsidy to all participants, for example, as exists in Mexico. A variety of tax models could be investigated.
- **Refinement of demographic characteristics** would permit more confident financial projections and tests of the impacts of changes. Immigration rates could be considered, as could the possibility of mortality and fertility rates that vary by a third variable like education status.

It is hoped that the modelling work undertaken so far, together with this paper and its recommendations, provides a useful start to the discussion and further analysis that must follow it.

[38] It is acknowledged that some would suggest that death and disability should be regarded as a defined benefit and included with the DB component as part of the split. The philosophical approach followed here is to consider retirement savings separately from death and disability benefits.

[39] The most straightforward approach has been used to start off with to provide a baseline for much-needed comment and further exploration. Thoughts on the lower earnings limit and all other parameters are warmly invited.

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APPENDIX

ASSUMPTIONS

Any modelling requires a set of assumptions to support it. It is important to be clear about the assumptions underlying both models described in this paper so that readers can assess the usefulness of the modelling, particularly if they hold different views.

Guiding principles

The modelling is founded on an underlying rationale supported by the following:

- **Sound actuarial practice.** The models are established within the framework of established actuarial practice and guided by the principles and norms underpinning international actuarial practice in social security, as set out in the ILO and ISSA text on the subject (Plamondon et al. 2002).
- **Best estimate assumptions.** Models sometimes err on the side of caution or optimism in order to satisfy particular objectives. That is not the case in these models: in all instances, the intention is to manage uncertainty by using the best available estimate.
- **Comparability of options.** As a number of alternative designs are considered, they need to have common traits to ensure consistency and comparability. In this case, comparability is established by using a constant 'budget' of contribution rate, 15 per cent of qualifying earnings. Of this, 12 per cent is assumed to be available for retirement saving, with the 3 per cent balance set aside to meet the costs of death and disability benefits, separately modelled.
- **Qualifying earnings** are assumed in all cases to exclude the first R12 000 of annual income and have no upper limit. The cut-off is well below the tax threshold, to be as inclusive as practically possible, and is somewhere around the de facto minimum income of South Africa's lowest paid full-time workers.
- **Replacement ratios** are targeted at around 45% for middle-income South Africans. Such a target proves too ambitious in the case of strongly redistributive strategies, for example, a simple increase to the BSP.
- **Income definitions.** Determining what constitutes a middle-income South African is not easy, particularly in the context of long-term projections in a period of socio-economic change. The modelling uses an imaginary individual earning an annual R100 000 in 2005 terms roughly mid-way through his or her career, the equivalent of a trained, skilled civil servant like a senior nurse or teacher. This is roughly equivalent to early career annual earnings of R30 000.

Data sources

Data is obtained from the 2005 General Household Survey (GHS), based on 2001 census data and modified by EPRI.

Modelling parameters are drawn as well from the ASSA 2003 Aids model, standard assumptions, with acknowledgement. Enormous assistance has been received in managing the GHS data set from Professor Heather McLeod.

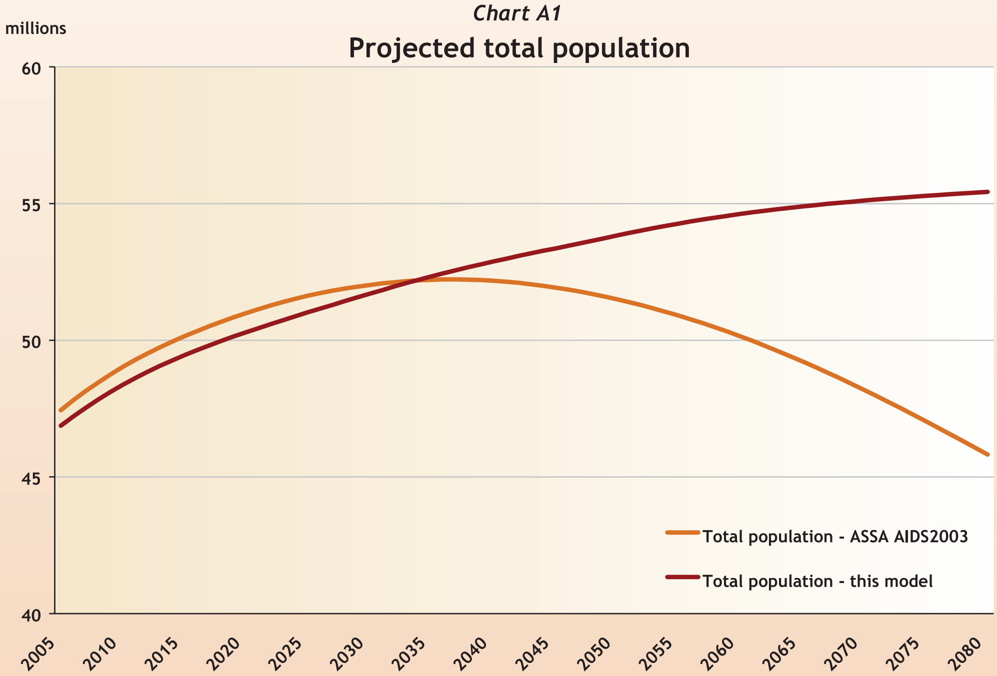
Long-term projection parameters

The following assumptions are used to drive the long-term projection of system income and outflows:

- **Mortality,** the assumed rate at which participants die, is based on the corresponding mortality assumptions of the standard version of the ASSA 2003 Aids model. Rates vary by age and gender and also change over time. The ASSA assumptions are used over the entire projection term in the case of mortality, without attempting the difficult (and unnecessarily precise, at this early stage) task of differentiating mortality rates across educational groups.
- **Fertility,** the rate at which women have babies, is based also on the corresponding assumptions underlying the ASSA model set until 2020 and are thereafter modified. The ASSA model results in significant population decline over the very long term, which is probably not sustainable. The model used in this paper adds 0.75% to the age- and time-based fertility rates in the ASSA model in 2021 and an additional 0.75% in each successive year until 2050, levelling at a rate of 22.5% above the corresponding rates in the ASSA model. The resulting total population increases gradually over the course of the projection period (see Chart A1).[40]
- **Immigration** is ignored, in line with projections in the ASSA model, which allows for immigration as experienced in the past, but projects zero net immigration in the future.[41]
- **Gross domestic product** does not form a significant part of projections, with most outputs set out in real money terms rather than as a percentage of GDP. The model assumes long-term real growth in gross domestic product of 3.5%, higher than the general real wage growth by 1.5 percentage points, reflecting some benefit to capital.[42]
- The **starting date** is 2005 to correspond with the data set. Subsequent modelling should test for later starting dates, but the results and conclusions are unlikely to be affected by this, because it amounts essentially to adopting a slightly different starting population mix.

Chart A1

Projected total population



[40] The difference in the 2005 level arises because each model projects population from an earlier date, with a slightly different outcome. The preference is to stick with the GHS total, based on projected 2001 census data, rather than re-calibrate to ASSA 2003 Aids data, but to re-weight GHS data across age in line with ASSA in order to ensure total mortality and fertility rates are consistent. Differences in the starting population are small.

[41] It is the author's firm belief that net immigration will be positive and one of the strongest drivers of total population growth, but modelling immigration with confidence is difficult because one needs to make assumptions not only on the numbers but on the age, gender and socio-economic standing of immigrants. Allowing for higher fertility helps to sustain overall population growth at levels in line with conviction but is a poor substitute, equivalent to assuming that all immigrants are new-borns with the same average socio-economic status of the population as a whole.

[42] Few of the projections reported in this paper make reference to GDP, but this is nevertheless an important assumption. The difference between wage growth and GDP growth is relatively large. World Bank authors report an assumed gap for long-term modelling in Kazakhstan of 0.5 percentage points (Hinz et al. 2005). It is not clear from the description in that paper whether similar assumptions would apply to other countries. In the modelling described in this paper, it is assumed that a relatively large share of economic growth accrues to the owners of capital.

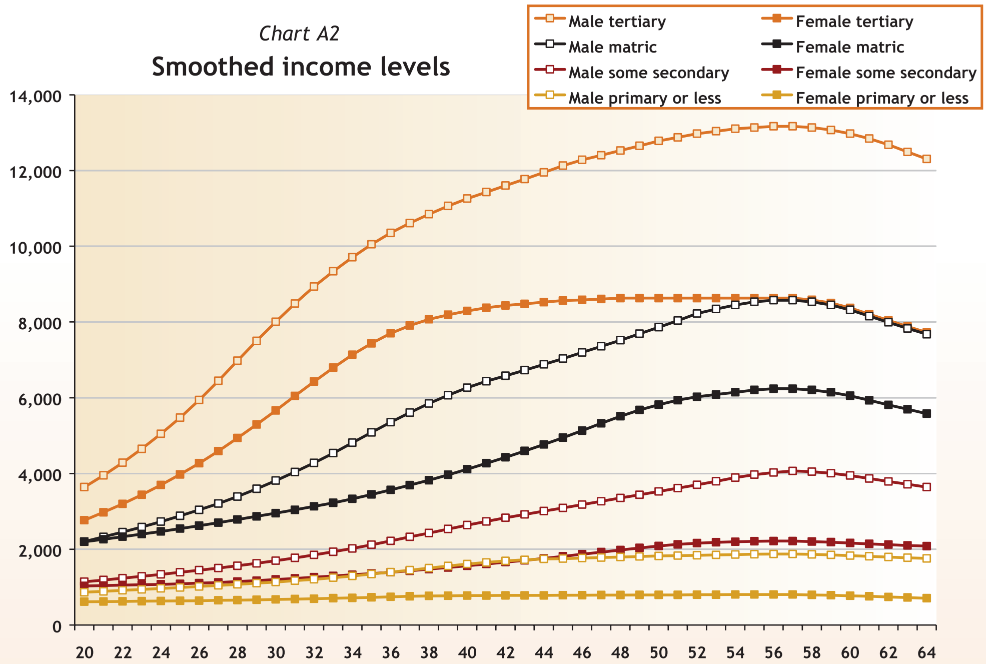
Income level and distribution

The income level of participants is a key parameter set because it drives the economics of the system. Setting today's and tomorrow's income distribution involves a number of considerations and it helps to think of members as falling into a number of different categories, as described below.

- **Today's elderly** are not affected by income assumptions under a universal BSP system, as they all receive the basic state pension no matter their current or future earnings.

Chart A2

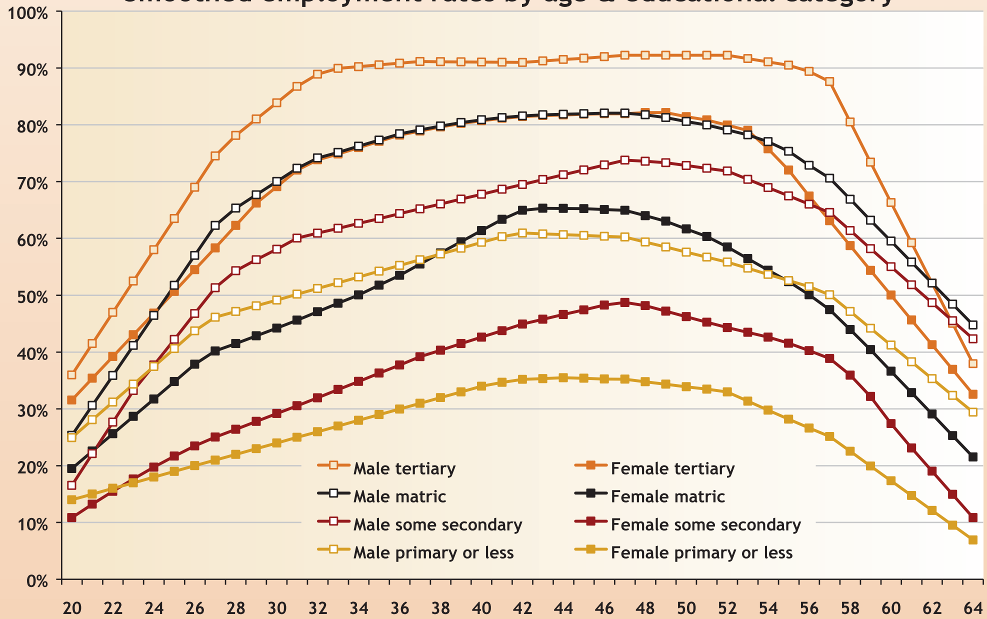
Smoothed income levels



- **Today's workers** are assigned an income level according to GHS2005 data. This data is likely to suffer two forms of under-reporting: (1) some respondents refuse to disclose income, and (2) those that do so declare below actual income. The data is assigned by education category and gender, and smoothed by age (see Chart A2, which charts smoothly monthly income).[43] Employment rates for each gender and education category combination are smoothed across the age range (see Chart A3). Under-reporting of income is adjusted for by applying employment rates to the income curves.[44]

Chart A3

Smoothed employment rates by age & educational category



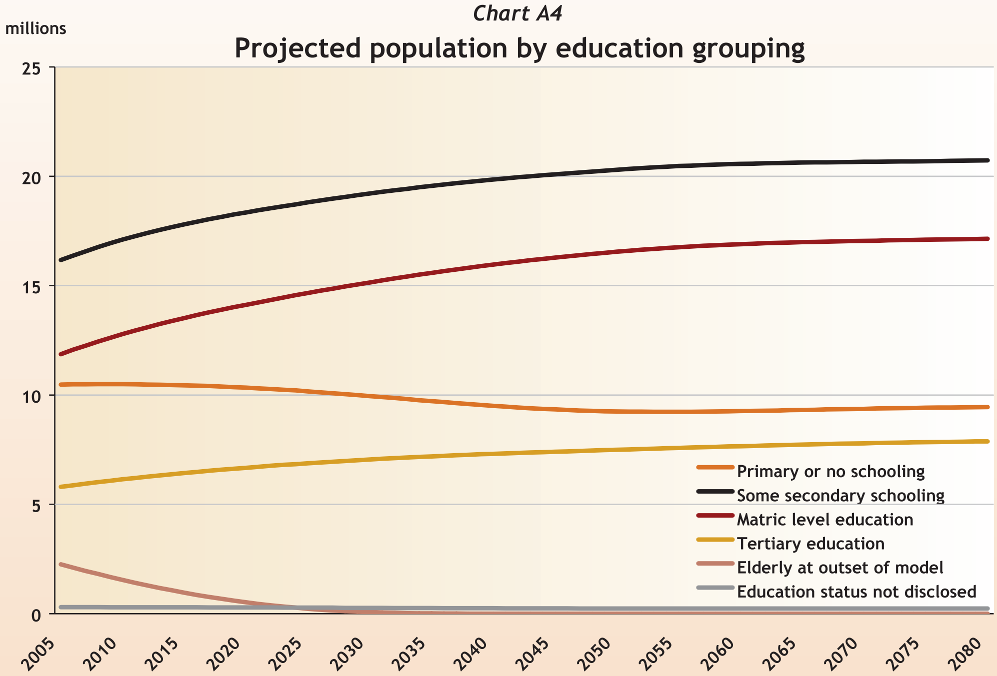
[42] Smoothing is a semi-automatic process that removes outliers but retains the broad shape of curves. Logical reasons for every peculiarity were not sought and some unexplained peculiarities remain. The salaries of females with a tertiary education, for example, climb rapidly until the late thirties and then level off. This is clearly evident from the available data and is retained in the smoothed data without seeking reasons for the phenomenon. It may result from a mixing of generations or from other explainable features such as increased incidence of part-time work.

[43] The size of the group in the GHS that describe themselves as employed is larger than the group that declared an income. The earnings patterns are applied to the population proportion describing itself as employed. This raises total declared annual income from R445.7m to R520.8m, an increase of 16.8%, which should be verified against credible independent sources.

- **Today's children** are allocated to education bands and assumed to follow the same salary patterns with the addition of a year-by-year real increase in background wage rates.[45] Allocation to educational status is random according to the population distribution of South Africans aged between 25 and 34 inclusive.[46]
- **Tomorrow's children** are allocated at birth to notional education categories according to the same distribution across education bands and also assumed to follow the same salary patterns with the addition of year-to-year increments given by the background wage growth rate. This results in a gradual increase in education levels, as illustrated in Chart A4.,[47,48]
- **General wages** are assumed to grow at 2% above the rate of inflation on a year-to-year comparison of equally educated, age-and-gender-constant workers.

Chart A4

Projected population by education grouping



[45] This is the year-to-year increase in wages on a like-for-like basis across education category, gender and age. The real increase experienced by a given individual is this background wage increase plus the increase implied by the smoothed salary progression for the particular personal characteristics of age, gender and educational status.

[46] Considerable attention was given to this allocation. Thought was given to the option of linking the education status of a child to the corresponding status of his or her parents. Determining which parent to use or setting up some sort of average of the two parents is complex and flawed. This is particularly challenging in the case of tomorrow's babies because paternal fertility rates are difficult to establish and predict. Even the option of randomly allocating children to educational bands is tricky because appropriate weights need to be developed. The 25-34 age range has been decided on because this group is considerably better educated than the population as a whole, and therefore better representative of tomorrow's education standards, but is old enough for tertiary degrees to have been completed.

[47] One of the by-products of this approach is a steady increase in the educational standard of South Africans, in turn resulting in an increase to wages in excess of the background real-wage growth assumption. This has been measured to determine whether it might be regarded as appropriate. The additional annual wage growth of 1.8% in the early years is regarded as not unreasonable.

[48] Small disconnects appear in some of the long-term projections because of systematic changes in assumptions between the cohorts. Today's children, for example, have a constant average education status that is slightly different to that of the generation that precedes them, most likely because the age group 20 – 24, whose educational status is regarded as fixed, have poorer education levels, on average, than the generation modelled to follow them, who are randomly assigned to education groups. The resulting elbows in the curves are very small (see Chart 6, for example) and sophisticated blending across the boundaries of the cohorts is not regarded as sufficiently valuable for the potential errors that such a process might introduce.

Modelled parameters

The model has been developed to allow for a variety of possible system designs. For completeness, the table below illustrates the range of parameters included in the model.

Table A1. Input parameters

Start Year	2005		Fixed starting year
Start Month	7		Fixed starting month
Retirement Age F	65		Fixed retirement age for women, for earning related pension benefits and all medical benefits
Retirement Age M	65		Fixed retirement age for men, for earning related pension benefits and all medical benefits
Retirement Age FBSP	60		Fixed retirement age for women for basic state pension
Retirement Age MBSP	65		Fixed retirement age for men for basic state pension
Inflation	5.00%		Annual difference between real and nominal prices
Salary Lower	12,000	real	Lower limit to qualifying salary
Salary Upper	100,000,000	real	Upper limit to qualifying salary
Pension Growth	1.00%	real	Assumed fixed annual increment to pensions in payment (above the rate of inflation)
Pension Growth Med	0.00%	real	Assumed fixed annual increment to post-retirement medical benefits in payment (above inflation)
Contribution Percent General	6.00%		Contribution rate for retirement benefits (percent of qualifying salary)
Contribution Percent NDC	0.00%		Contribution rate for purposes of NDC build up (percent of qualifying salary)
Contribution Flat	0	real	Flat contribution per participating member for retirement benefits
Contribution Percent Medical	0.00%		Contribution rate for medical benefits (percent of qualifying salary)
Contribution Flat Medical	0	real	Flat contribution per participating member for medical benefits
Benefit Flat	9,600	real	Flat annual payment per beneficiary pension
Benefit Flat Instant	TRUE		If true, the specified flat benefit applies immediately to all participants currently above BSP age
Benefit Flat Per Year	0	real	Annual benefit per year of participation - pension
Benefit Flat Increases	1.00%	real	Year to year increases in the starting value of all flat retirement benefits
Benefit Flat Med	0	real	Flat annual payment per beneficiary - medical cover
Benefit Flat Per Year Med	0	real	Annual benefit per year of participation - medical cover
Benefit Flat Increased Med	0.00%	real	Year to year increases in the starting value of all flat medical benefits
Benefit Salary Multiple Flat	0.00%		Annual benefit per unit of career average salary
Benefit Salary Multiple Per Year	0.75%		Annual benefit per unit of career average salary for each year of participation

Replacement ratio calculations

The assumptions used for the replacement ratio modelling are as follows:

- The **starting age** is 20 for all workers.[49]
- The **retirement age** is assumed to be 65 for all workers and any BSP received by women prior to this age[50] is not taken into account in the calculation.[51]
- The **average investment return** in the DC component is assumed to be 5% real.
- The **total expense ratio** for DC saving is pegged at 1%.[52]
- **Annuities** are assumed to be discounted at a rate of 3% real and at a constant mortality rate given by the age-and-gender mortality probabilities in the actuarial table PA90 with a downward age adjustment of four years.[53]
- **A complete working career** is assumed for the standard projection. This is the easiest assumption to make, but also the only assumption guaranteed to overstate replacement rates for the majority of the population, who do not experience complete working careers and therefore save less than assumed. The problem with any alternative to the complete career is that it is difficult to set a typical alternative working pattern with any confidence. To show the impact of career interruptions, the analysis sets out the replacement ratio calculations that would result from using today's employment rates, differentiated by gender and education status, as the probability of working.[54]

[49] This probably understates the average starting age for higher earners, consequently overstating their replacement ratios by a small amount. The reverse would be true for lower earners, except that they probably also retire earlier than the assumed 65, balancing any understatement that would otherwise apply to their calculated replacement ratios.

[50] Women currently receive a BSP from age 60. This is assumed to continue indefinitely in the standard assumption set.

[51] Replacement ratios for women are thus correctly determined from age 65, but understated for the period 60 to 64.

[52] This is higher than the recommended 0.60% of assets limit in the corresponding discussion paper on accrediting private service-providers. It allows for the expectation that fees will not start out as low as this and also for the cost of advice outside of the provider fee.

[53] Constant mortality is inconsistent with the assumptions in the long term, but the four-year adjustment allows for conventional estimates of the expected mortality of annuitants some twenty or thirty years from today.

[54] An example of the impacts of shorter and interrupted working careers on retirement saving is given in the discussion of DC benefits, section 3.4 (compare Chart 8 with Chart 7), and another is presented with recommendations in section 5.1 (compare Chart 20 with Chart 17).

Notes

Part 3

South Africa’s Mandatory Defined Contribution Retirement Saving System: Provider Accreditation

by Rob Rusconi

Part 3

CONTENTS

GLOSSARY OF TERMS

ARI	**Accredited Retirement Institution,** the name given to the entities licensed to provide retirement savings services, perhaps also death and disability insurance, to the individuals who choose to redirect their mandatory contributions from the default public-sector entity to a private-sector alternative. The Accredited Retirement Institution is contracted by a Mutual Pension Fund owned by its members.
DB	**Defined Benefit**, a pension fund arrangement under which the benefits received by fund members are pre-determined by reference to other variables such as salary prior to retirement, providing solidarity through the sharing of risks and benefits across members.
DC	**Defined Contribution,** a pension fund arrangement under which the contributions into the system are defined in advance and benefits are based on the accumulation of these contributions, less expenses, plus investment return, usually without any guarantees or sharing of risks between members.
FSB	**Financial Services Board,** the entity currently responsible for regulating non-banking financial services entities, such as insurers, retirement funds and collective investment providers.
GSRF	**Government Sponsored Retirement Fund,** the working name for the entity responsible for collecting contributions and providing benefits under the pay-as-you-go system proposed by the Department of Social Development.
LOA	**Life Offices Association,** an industry body representing the interests of South African insurers.
MPF	**Mutual Pension Fund,** the legal entity housing the assets of participants. The Mutual Pension Fund contracts an accredited retirement institution to provide administration and asset management services and, if applicable, the provision of death and disability insurance.
OECD	**Organisation for Economic Co-operation and Development,** a 30-country entity with a unit responsible for researching and co-ordinating best practice policy in the design and regulation of private pension systems. South Africa was recently awarded observer status of this unit.
PAYG	**Pay-as-you-go,** a retirement system under which the cost of benefits is met from other sources of income, like general tax revenue, rather than by building a fund in advance.
PFA	**Pension Funds Adjudicator,** the statutory authority responsible for hearing the complaints of pension fund members and issuing rulings in response to these complaints.
SARS	**South African Revenue Services**, the tax collection authority in South Africa.
SOAG	**Social Old Age Grants,** the system currently in place to provide retirement benefits to elderly South Africans, recently increased to a level of R870 monthly and means-tested to focus on the needy. This is a pay-as-you-go system, as annual outgo is funded from general tax revenue.

[1] Hybrid forms, mixing the best of DB and DC systems, exist both at national and company level. Examples include the unfunded Notional Defined Contribution, used in a number of countries, and the Dutch Collective Defined Contribution. This paper limits its attention to the individual member DC environment, referred to in many countries as Individual Account systems.

SUMMARY OF RECOMMENDATIONS

South African policymakers are considering the introduction of a system of mandatory saving for retirement in individual accounts. Under the proposals, contributions are to default to a public-sector entity, but participants may opt out of the default provider, redirecting contributions to an accredited private-sector alternative. This paper considers the conditions that ought to be placed on firms applying for registration as accredited retirement institutions for the right to provide savings vehicles or risk products to these savers.

This research has been commissioned by the Department of Social Development, and has its recommended framework in mind, which includes a comprehensive contributory social security system. The concepts and recommendations of this paper nevertheless apply to any mandatory individual account scenario with some form of private-sector management.

This is a discussion document. It puts forward a number of proposals but the wide range of subjects impacted by the retirement savings market is not covered in sufficient depth for detailed recommendations to be ventured. The most significant suggestions are set out below for further consideration.

Overall ethos

This is expected to be a substantial financial system backed by mandatory contributions. It is imperative that the marketplace promotes appropriate competition between providers and low cost to participants, establishing confidence among South Africans that their interests are properly safeguarded. Two key features of the market run through all aspects of system design and regulation:

- **Simplicity and standardization.** Products are simply designed, providing benefits that are clearly understood by participants, and they are easy to compare.
- **Consistency across providers.** Accredited retirement institutions (ARIs) compete with one another on an equal footing. The conditions for provider participation are applied with consistency across all private-sector entities and their public-sector competitor.

Legal framework

The proposed broad legal framework is analogous to today's collective investments environment.

- Participants selecting a provider become members of a **Mutual Pension Fund (MPF)**, each of which contracts an ARI to supply standardized services.
- **Governance principles** underlying the structure of ARIs are designed to maximize participant protection but do not limit inappropriately the types of organizations that may consider registering as ARIs. The trust-based framework is regarded as the most appropriate foundation to governance structures. Both non-profit and profit-seeking entities should be encouraged to apply.
- **Governance in practice.** ARIs are encouraged to treat governance standards as establishing merely a minimum, finding ways to compete on the basis of the soundness of their practical implementation of good governance structures.

Regulatory framework

The approach proposed for regulation and supervision of this market differs considerably from the corresponding approach used in pension provision today.

- **Proactive supervisory philosophy.** The supervisor proactively and continually monitors the ARIs – which will exist in relatively low numbers – to ensure that they are compliant and financially secure.
- **Comprehensive supervision.** Prudential regulation is supported by thorough regulation of advice and product.
- **Regulatory independence.** The supervisor raises finance from ARIs and is financially and politically independent of government. Structures are established to safeguard members of the executive of the supervisor and its advisory panel from political influence, while retaining the appropriate accountability to the relevant minister.
- **Existing regulatory structures** continue to work as at present, subject to the review processes provided for under current law. A distinct philosophy requires a distinct operation. The entity responsible for registering and supervising ARIs may form a department of the FSB or a separately established organization, as appropriate, with structures in place for mutual support and information sharing and the possibility of future merger of operations.
- **Advice** continues to be regulated under the existing framework, but modification to match the needs of participants is considered as part of an ongoing process of assessment.
- **Participant contributions** are collected centrally but the responsibility for managing accounts and processing benefit payments lies with the ARIs. Alternatives to this model must be considered.
- **Communication** to participants and the public at large forms an important part of the responsibility of the supervisor. This communication includes product and price comparison.

Product framework

A major development for the South African financial services environment is the specification of minimum product standards. In the interests of participant security and product simplification, standards are proposed in a number of areas.

- **Contributions and accumulated saving** must be placed with a single ARI.
- **Individuals**, not employers, have the right to exercise the choice of ARI.

- **Death and disability benefits** are partially provided from within the defined contribution (DC) system and participants may seek death and disability cover from ARIs, which must offer both savings and risk-cover products. Whether ARIs are permitted to outsource the provision of death and disability benefits requires further consideration.
- **Annuities** are provided by insurance companies, not ARIs. Participants must exercise a choice of annuity provider at retirement to avoid defaulting to the existing ARI, if it also offers annuities. Some state provision of annuities, up to a minimum level, is contemplated, and some standardization of annuity products is encouraged, to facilitate product comparison.
- **Administration charges** are reduced through structural interventions such as centralized contribution collection. Furthermore, limits to the available types of charges are considered crucial and limits to the level of charges require strong consideration, in the interests of participants. A long-term target for such a charge limit is an all-inclusive annual management charge of 0.60% of assets, or its equivalent contribution-based charge, approximately 10%.
- **Commission scales** are not regarded necessary under the assumption that administration charges are capped.
- **Disclosure and service standards** are set and monitored by the supervisory authority.

Investment framework

The proliferation of investment alternatives is not in the interest of participants, particularly in a mandatory saving environment, because it increases system costs without necessarily providing concomitant benefit. It is recommended that investment flexibility is limited in a number of ways.

- **Prudential limitation of investment classes** is implemented to safeguard the interests of participants, mainly by reducing the impacts of conflicts of interest and concentration of risk.
- **Minimum investment returns** are not required of ARIs.
- **Investment choice** is mandated, but strictly controlled. ARIs are required to make five portfolios available to participants, each meeting asset-allocation requirements to provide reasonably predictable and uniform risk-return characteristics.

Market description

How does this environment differ from what South Africa has at present?

The present range of providers will continue to service customers saving voluntarily, but the market for mandatory contributions, under the recommendations in this paper, would change significantly.

A limited set of providers, each probably developing significant scale, would sell straightforward, easily comparable products at low cost and low profit margins. They would compete on the basis of price and investment performance and would demonstrate the value that they bring to participants in unambiguous terms. The financial security of participants would be protected by a strong proactive supervisory process.

Concluding comments

Significant further input is required, from a wide range of stakeholders, in order to understand the consequences of these recommendations and their implications. It is hoped that this paper will give impetus to this process of discussion.

1. INTRODUCTION

This paper forms part of a set of recommendations formulated by the Department of Social Development under the general heading of restructuring South Africa's old age provision environment.

The paper therefore takes it as given that there is to be a

- mandatory pay-as-you-go (PAYG) social security system, incorporating the existing arrangement of Social Old Age Grants (SOAG), supported by compulsory contributions paid by all qualifying South Africans;[2]
- mandatory individual account system, with contributions defined as a percentage of salary, that are channelled into a publicly managed fund, the Government Sponsored Retirement Fund (GSRF), but with the right of participants to opt out of this fund into an accredited private-sector fund of their choice; and
- voluntary additional contributions paid into any vehicle selected by the saver.

The paper assumes that

- compulsion will establish a very large flow of contributions into the accredited fund environment; and that
- the standards imposed on the compulsory saving sector will have positive impacts on the equivalent standards in its voluntary counterpart.

At the time of writing there is uncertainty regarding the system of tax incentives applying to retirement contributions. The recommendations of this paper are unaffected by this uncertainty. The scope of its discussion is sufficiently broad to apply to other potential system designs and its recommendations are unaffected by the potential existence of the PAYG system and, with small modifications, would apply also to a defined contribution (DC) system without a public-sector default.

Many commentators assume that the conditions for competitive provision of products and services to the compulsory DC system are already in place. The author does not agree with this starting position, pointing simply to the current marketplace for tax-incentivized retirement saving. A number of fundamental concerns with the operation of this marketplace can be identified, particularly in the areas of cost-effectiveness, conflicts

[2] Details such as whether contributors earn above a certain threshold do not impact the content of this paper and are not part of the discussion covered by this paper. Similarly, the influence of a possible wage subsidy is not considered.

of interest and governance structures. These concerns cannot be addressed through incremental changes.

Even if the existing environment were operating effectively, it is argued that there is a need for higher standards in the contemplated compulsory DC system. As contributions are mandatory, it is a fundamental requirement of that system that it is safe, cost-effective and structured in a way that it meets the needs of the beneficiaries of the system, the South African saver, without being so harsh as to render participation by providers inappropriately challenging.

Four fundamental risks of retirement income social security systems must be addressed in the design and regulation of such systems (Gill et al. 2003):

- **Investment risk** arises from fluctuations to account balances and portfolio values. In a defined contribution system, this risk is borne by the individual.
- **Longevity risk** refers to the uncertainty of the period from retirement to death. This risk may be outsourced to an annuity provider, but is often shared by the retiree through product design or through opting out of purchasing an annuity.
- **Policy risk** is the possibility of intervention by policymakers in the operation of the system, for example, through setting constraints on investment rules that are not in the best interests of all participants, or through failing to safeguard the interests of participants against the impact of potential future changes.
- **Agency risk** arises from the involvement of the private sector in the pension system, and manifests in various ways: misappropriation of assets, conflicts of interest and negligence or ignorance by the provider or advising intermediary.

Any system, with its regulatory framework, must be assessed by considering the extent to which it protects its participants against the impacts of these risks.

The objective of this paper is to define the environment within which providers in the mandatory DC system must operate. It draws on local and international research and regulatory material, with specific input from countries as diverse as Sweden, Argentina and India.

The paper, supported by discussion of special topics in the appendices,

- recommends a revised **regulatory framework and governance** structure for this market (sections 2 and 3),
- sets out **proposed standards for the products** and customer service requirements for accredited providers (section 4), and
- discusses options concerning the **investment** of the underlying assets (section 5).

The framework and standards apply just as much to the public-sector 'default' vehicle as they do to privately owned 'opt-out' alternatives.

The author acknowledges with thanks considerable assistance from supervisory authorities and research experts from around the world, not least from members of the policymaking teams in South Africa. This report could not have been completed without that assistance, but the responsibility for any errors is mine, not theirs.

2. REGULATION & SUPERVISION

> An ever-present danger in regulatory systems is that the regulated will "capture" the regulators and prevent them from operating effectively. … Countries should assess their institutional and human capital capacities for regulating effectively before undertaking a decentralized mandatory saving plan. (World Bank 1994: 227)

The regulatory framework under which a financial services system is established has considerable impact on the way in which it operates in practice. South Africa already has a regulatory system for retirement saving products. The Financial Services Board (FSB) supervises all providers of such products, focusing on prudential management, and also regulates the advice that intermediaries give in the process of selling these products. South Africa does not directly regulate the products sold by South Africa's insurers.

Some may suggest that regulation is weak in this country, citing evidence of

- very high charges (Rusconi, 2004), particularly on individual retirement products;
- poor product disclosure on the same products, as evidenced by a raft of rulings against providers of such products by the Pension Funds Adjudicator;
- conflicts of interest and questionable business practices on the part of high-profile pension-fund administrators such as Alexander Forbes;
- serious mismanagement of pension-fund money, for example by Fidentia, responsible for managing the assets of the Living Hands widows and orphans trust;[3] and,
- the FSB's recent submission to Parliament disclosing efforts to increase its power and effectiveness.[4]

While some of this criticism may be valid, at least to an extent, the purpose of this section is not to criticize the existing regulatory framework, which has been designed for the trust-based system in existence today. The primary objective of this section is to demonstrate that a different approach is required for regulating the providers of products and services to the mandatory DC sector, which has a number of characteristics distinguishing it from today's trust-based environment:

- **Compulsion.** Since participation is mandatory, the policymaker has a greater responsibility to ensure that the environment is safe and efficient.
- **Standardization.** Products in this environment will be simpler and easier to compare, but will have to meet certain

[3] "The pension fund trustee system in general is hardly foolproof. Trustees of union funds, few of whom are full time and many of whom work for free, may lack the time and training to monitor funds adequately. In a Deloitte and Touche survey on retirement fund governance, two-fifths of the trustees interviewed spent 10% or less of their time on fund-related matters. But where trustees lack knowledge, experts do not necessarily support better decision-making. … As the government gears up for a compulsory pension scheme, there must be better oversight of workers' money. At the moment, our retirement funds seem to be easy pickings" (Tumi Makgetla, Mail&Guardian, 2 March 2007).

[4] "… the FSB has been unable to act swiftly against transgressors, hamstrung by a lack of sufficient powers. Currently, the only two legal remedies it has are to refer matters to the National Prosecuting Authority or to take away the licence of a financial institution. It has had no administrative remedies in its arsenal of enforcement powers. The FSB's deputy executive officer for pension funds, Jürgen Boyd, told Parliament's finance committee yesterday that the FSB and National Treasury were discussing legislative amendments that would create an administrative enforcement committee empowered to impose penalties on all financial institutions" (Linda Ensor, Business Day, 7 March 2007).

standards. Ensuring product standards requires a different approach to regulation than the current focus on prudential and advice supervision.

- **Scale.** The supply side of this market will be unlike anything currently in existence in South Africa. Product standards will be tight and the number of providers few. Each of the providers is likely to have the benefit of significant economies of scale, reducing the impacts of regulatory overheads. The regulatory authority, on the other hand, will have the luxury of focusing attention on just a few supply-side entities, making it possible for it to undertake scrutiny of the activities of these providers at a level appropriate to provide the security required of the system. This requires a different approach to regulation, however – one that is more proactive and less reactive.

The regulatory approach proposed by this paper is new for South Africa, but it is not without precedent in a large number of countries around the world. Through research into academic papers and correspondence with the supervisory authorities in a few of these countries, the author aims to demonstrate that there is a better way to supervise a mandatory individual account system than is currently available through existing supervisory structures.

Types of regulation

Three types of regulation may be contemplated for the proposed environment of mandatory contributions.

- **Prudential regulation** focuses on safeguarding the financial strength of the regulated entities. This has been the focal area of the FSB for much of its existence.
- **Regulation of advice** looks to ensure that the information given by providers and intermediaries to product purchasers meets appropriate standards of quality and independence. This has recently been introduced through the promulgation of the Financial Advisory and Intermediary Services (FAIS) Act, 2002.
- **Product regulation** takes these further, putting constraints on the design and possibly pricing of the products in the market.

Comments by South Africa's National Treasury signal concern that the emphasis on prudential regulation has contributed to a sequence of undesirable outcomes, notably providing poor value for money to customers exiting long-term saving products prematurely, without adequately alerting them to the consequences of early termination.

> … these [generally poor] early termination values are to some extent the outcome of the regulatory environment in which retirement annuity funds operate. A Financial Services Board (FSB) study has shown that the values provided on early termination, both in terms of policy surrenders and conversion to paid-up, are in line with the prudential requirements of governing statutes. (National Treasury 2006: 13)

While the existence of prudential regulation is not in itself a problem, greater balance across other areas of regulation is required for the accredited environment contemplated in this paper. Poor disclosure, for example, has significantly contributed to the insensitivity of consumers to existing business practice that is not always in their interest.

A summary of what follows

This part of the paper starts with a discussion of the available regulatory models, setting out what the author believes should be regarded as best-practice requirements for a regulator. From there, the paper moves into some of the more detailed aspects of the proposed regulatory framework, covering:

- the principles of governance,
- the scope of supervisory responsibilities,
- the process of registering providers and advisory channels,
- the question of premium collection,
- prudential management of providers,
- whether there might be an optimal number of providers, and
- how providers ought to be sanctioned for non-compliance.

The paper distinguishes between regulation and supervision. The former is about setting the rules and the latter about enforcing them.[5] Of course there are overlaps between the two concepts – these are unavoidable – but the section that follows is restricted to principles, while later sections consider the framework for their enforcement.

2.1 Regulatory models

The design and operation of the private pension systems are as varied as the settings and motivations behind them. All share extensive regulatory and supervisory systems that seek to establish and enforce a framework that enables them to function fairly and efficiently, and to provide a high level of security. (Hinz & Mataoanu 2005: 4)

This section starts by proposing a framework for considering issues around the regulatory structure. It discusses some of the thinking on the issue from around the world and itemizes a set of standards that could be regarded as forming the minimum requirements of a sound regulatory structure for a mandatory DC saving system.

An introduction: three types of regulation

Roberto Rocha and his colleagues (Rocha et al. 1999) draw parallels between the regulatory principles of the banking industry and the corresponding measures appropriate to pension saving. The Basle Committee has proposed structuring the supervisory function of the banking industry into three main areas:

- **ex-ante,** covering activities like licensing, approval of corporate activities, and advocating and promoting correct incentives;

[5] Richard Hinz and Anca Mataoatu express this distinction more precisely: "Regulation is defined as the establishment of specific rules and standards, and supervision as the process of implementing the system and enforcing compliance with the rules" (2005: 4).

- **on-going,** including planning and executing bank examinations, assessing and strengthening audit programs and communicating with bank boards; and
- **problem resolution,** for example, intensive problem-bank supervision, formal enforcement orders and removal of directors, managers or auditors.

They suggest that the supervision of pension funds may be categorized as following two basic models, the first of which is associated with systems in which a few providers cover a marketplace, as in most mandatory individual account countries.

> Supervision of these systems emphasizes the first two supervisory "building blocks", by limiting participation in the system to entities that meet strict structural standards, supported by close and direct monitoring of their status and activities through extensive reporting requirements. This approach is closer to the bank supervision model followed in most countries, through its reliance on strict adherence to stringent regulations in order to pre-empt potential problems. These Latin American systems are often characterised as pro-active in regard to their compliance activities… (Rocha et al. 1999: 24)

The *pro-active* approach, what is referred to in this paper as prospective, works in that environment because there are few providers, making it possible for the supervisory agency to exercise stronger control over each of them. Each of the providers has greater scale to respond to supervisory requirements, particularly as these are regular in nature and should form a natural part of the administrative infrastructure of the provider. This is complemented by virtually continuous contact with providers to ensure compliance with strict regulatory and product standards.

The second broad model of pension supervision is referred to by the World Bank as *reactive* and by this paper as *retrospective*. This model

> is associated with systems that utilize the Trust/Foundation form of organization. These are systems which are typically voluntary and employment based, with a large number of funds operating as intermediate vehicles for the investment and collection of funds. Investment management is often conducted on a contractual basis through other types of financial service organizations. Supervision and enforcement within this model is labelled as reactive, because the supervisor usually intervenes only when problems are reported, either by trustees, fund members, external auditors, actuaries, or other relevant players (including other supervisors). Pension supervision is more remedial in nature, or more oriented toward the third element of problem resolution. The system essentially relies on other active players monitoring the funds, and also on credible deterrents to violations of the laws. (Rocha et al. 1999: 25)

A reactive model is currently in place to supervise pension arrangements in South Africa. Perhaps the greatest source of system weakness in this country is indicated by the last sentence in the quotation: "The system … relies on other active players monitoring the funds and … on credible deterrents to violations of the laws." South Africa does not appear to have independent monitoring – or if it does, it is not operating effectively – and its deterrents may not have sufficient credibility. Nevertheless, retrospective supervision plays an important part in the regulation of any saving system and it should not be discarded simply on the basis of its weaknesses.

Vittas (1998) uses different terminology to describe the same distinction. He describes the prospective regulatory system in Latin America, in which providers are subject to significant product and investment constraints as *draconian* and the retrospective Anglo-Saxon model, growing rapidly among other OECD countries, as a *prudent person* alternative.[6] His thinking is consistent with that of Rocha and his colleagues.

Hinz and Mataoatu ask "whether these represent distinctive modes of supervision or . . . simply define the ends of a continuum of possible approaches" (2005: 4). Their analysis appears to support the view of a continuum, in turn allowing countries to modify their approaches as circumstances permit.[7]

A third type of regulation, *the market*, is proposed. Regulatory and competitive structures should be such that market players seek to distinguish themselves from their competitors by virtue of their willingness to go beyond the minimum requirements of the regulation to provide greater protection to their customers.

Disclosure is an example of market-based self-regulation. An industry body may motivate standards of disclosure that are above those required by the regulations themselves. Individual providers may pride themselves in going yet further to set out product details clearly to customers.

Standards of governance provide another example of self-regulation in the market. As discussed further on in this paper, regulation can do no more than provide a framework for governance. The market needs to implement this in practical ways and should seek to do so in a competitive manner. This paper dedicates a separate chapter (section 3) to discussion of the importance of market-based governance.

Gordon Clark's outstanding treatise of governance alternatives (2003) echoes this approach in a three-part methodology of his own, suggesting that fiduciary responsibility must be entrenched by a set of regulations and overlaid further by a market mechanism that encourages efficiency and innovation within appropriate limits.

> I argue that the golden-rule of fiduciary duty (model 1) and its constituent moral imperatives are insufficient for governing pension fund performance. I show that there is a complementary relationship between fiduciary duty and second-order statutory rules and regulations (model 2). And I show that the apparent limits of both suggest the market (model 3) may have an important role to play

[6] If the choice of language appears a little biased, he points out that the Chilean regulations are considerably less restrictive than the corresponding constraints in that country during the 1960s and 1970s, and that they were put into place in the context of poorly developed capital markets, to protect the interests of system participants. To this we should add the point that these constraints have since been reduced as capital markets have matured and the knowledge of participants improved.

[7] As examples of modification, some Latin American regulators are reducing the intensity of the restrictions placed on pension providers. This is the stated policy of, for example, the Chilean regulatory authority.

> in pension fund governance. The asymmetrical distribution of information between pension fund institutions and their beneficiaries and related stakeholders means that no one model of pension fund governance is likely to be successful. (Clark 2003: 1)

All regulatory systems should combine the three types of supervision in a way that best meets the needs of the customers to that market. A concentrated product-regulated individual account system should be supported by a prospective regulatory model and a broad trust-based system may best be supported by a retrospective model, but neither the prospective nor the retrospective approaches should be used in isolation. And in both instances, additional self-regulation must be encouraged through establishing appropriate competitive forces and encouraging consumers to select their provider on the basis of the care taken to safeguard their financial interests.

Scope of regulation

The intention of this paper is not to describe in detail the regulations that ought to apply to providers of service to participants in the compulsory savings environment, but to set out the principles under which these providers might be supervised. It is nevertheless helpful, by reference to World Bank discussion (2005), to set out the likely scope of the regulation covering these entities, with motivations for each recommendation.

It is important to learn from the lessons of other countries but not necessarily to swallow their prescriptions without question, and the author does not agree completely with the sentiment expressed by the World Bank in its recent summary of reform dynamics:

> For a country following the open-end fund concept (as in Chile), the Bank strongly suggests initially applying strict regulations and relaxing them gradually as sound financial markets develop. The strict initial rules include a limited choice for participants, the licensing of specialized providers under the rule of one fund–one account, uniform pricing and limited forms of fees, detailed investment limits, extensive disclosure, minimum return rules and state guarantees, and proactive supervision. The reason for the initial "Draconian rule" is essentially twofold. On the one hand, the new compulsory system starts with a weak capital market, limited traditions, and a lack of familiarity. On the other hand, strict regulations offer safeguards, control moral hazard, overcome opposition to the funded scheme, and are better able to prevent early failures. It is imperative to relax the rules as the market develops and the system matures. (World Bank 2005: 171)

Strict regulations provide safeguards and control moral hazard, and are better able to prevent market failures, but it is not true that South Africa has weak capital markets, limited traditions and a lack of familiarity with this type of arrangement. While strong regulation is a very important part of the recommendations set out in this note, this is aimed primarily at establishing a safe and reliable environment for savers, more so than at present. Many of the elements of the so-called 'Draconian rule' are included in the recommendations of this note, but their inclusion is motivated by a desire to improve on existing structures rather than constrain providers so much that innovative offerings in the best interests of customers are no longer possible.

The World Bank (2005) goes on to list two sets of regulations: those that it regards as not controversial and those that it suggests are subject to ongoing controversy. The first group of regulations is listed below. These suggestions are all fully supported and are discussed further in this document:

- appropriate licensing and capital requirements (section 2.4);
- full segregation of assets, sponsors, management firm, and custodian, and the use of external custodian banks (5.1);
- asset diversification and the rules of asset management, including the qualifications and licensing of internal or external investment managers (5.2 and 5.4);
- asset valuation rules (5.1);
- actuarial reviews and financial audits (2.6 and 3.1);
- transparency and information disclosure (4.7 and 4.8); and
- effective supervision (2.3) and consistent application of sanctions (2.8).

The more controversial regulations, on which more discussion is required in this document (again, section references are indicated) are as follows:

- **Controls on market structure and choice.** It is recommended that separately licensed institutions, only, be permitted to provide services to this market (section 2.1), that they must meet stricter capital and licensing conditions than in other parts of the retirement saving market (2.4), and that they must report more frequently to the regulator and all other affected parties than is currently the case (3.2). It is recommended also that these institutions would be required to meet a range of product, investment and servicing requirements (sections 4 and 5).
- **Funding, investment and portability rules.** Consistent with the direction currently being taken by National Treasury's pension reform task team (National Treasury, 2007), it is proposed that these vehicles are fully funded and fully portable, at all times, though acceptable charges may be deducted in a fully transparent manner. Investment limitations are a contentious issue and are discussed in more detail in section 5.
- **Legal investment limits versus the prudent person principle**. This bridges both investment issues (section 5) and governance requirements (section 2.2 and 3.1). A combination is envisaged.
- **Limits on commission and switching.** This is part of a much wider discussion of the advantages and disadvantages of explicit limitations to fees, covered in

section 4.4. Considerable improvement to disclosure models, together with product standardization, should improve the level of consumer understanding and hence the effectiveness of price competition mechanisms, but a set of price ceilings is contemplated as well. Switching flexibility is considered in section 4.2 and commission models in section 4.5.

- **Profitability rules and guarantees.** In some mandatory individual account systems, providers must meet certain investment return thresholds and must share with their customers profit earned in excess of a stated level. This issue is discussed in section 5. There are considerable risks to such a system, but consideration must also be given to the risks to system participants of not stipulating minimum investment returns.

Authorized entities

A fundamental question in the mandatory individual account system is who may provide such products.

> There are three types of institutions that may be authorized: corporate pension funds; specially authorized independent pension funds; and ordinary financial institutions (such as banks, insurance companies or mutual funds). (Vittas 1998: 15)

Countries that mandate retirement saving by employers, such as Switzerland, Australia and Hong Kong, set up regulatory frameworks that permit corporate pension funds. They often also establish independent pension funds to take care of the needs of the self-employed and those working for small employees, for which a multi-employer arrangement provides the necessary economies of scale. Kazakhstan, Poland and Hungary are among the many countries that provide for co-existing corporate and independent funds.

In Latin America, on the other hand, where the saving mandate falls to the individual, pension funds may be operated only by specially authorized institutions, though there is a wide variety in the types of entities that may set up such institutions. This is supported by the existence, in some but not all Latin American countries, of a specialized regulatory entity established to oversee the mandatory saving industry (Queisser 1998; Srinivas et al. 2000):

> In Hungary, Poland and most of the Latin American countries, a new agency was established to supervise the new pension funds. The exceptions are in Colombia and Uruguay, where this responsibility falls on the Central Bank. These agencies ensure compliance with regulations on capital, disclosure and reporting, commissions, transfers between funds, rates of return and investment allocation. In other countries, such as Australia, Switzerland and the United Kingdom, existing financial regulators expanded to cover pension funds. (Srinivas et al. 2000: 8)

Entities permitted to manage voluntary saving are usually subject to a more limited set of constraints, since the authorities regard the need to protect such saving as lower than for its counterpart in the mandatory environment. This leads to a wider range of entities being permitted to administer and manage this type of saving – banks, insurers and mutual funds not being required to meet the standards of the mandatory saving environment, such as maintaining segregated assets for these accounts.

Demarco et al. (1998) ask whether separately supervised entities are needed, citing analyst suggestions that they reduce the overall efficiency of the system. The authors defend their position that a separate supervisory agency is required, setting out four reasons for this position.

- Since the system is mandatory, the policymaker has a special obligation to ensure that basic rules are met and supervisory standards adhered to.
- Pension systems lie at the nexus of capital markets, insurance and social security, which means that they have a unique combination of characteristics that require specific supervisory attention.
- Some products in newly created mandatory pension systems are new, such as life or retirement insurance, because the public pension systems preceding these systems were often unsupervised.
- Citizens may be suspicious of the publicly run systems preceding the individual account system.[8]

What of South Africa? The last three of these reasons, it could be argued, do not apply to this country. South African providers have excellent experience running complex product combinations and citizens should have reasonable confidence in a system that extends the existing voluntary system.

On the other hand, the system does not appear to be working particularly well. The skills of fiduciaries do not appear to be universally high enough, leading to a dependence on professional advisers. The motivations and conflicts of interest of these advisers and the practice of product providers have come under tremendous scrutiny recently, with serious and wide-ranging questions being asked of the system as a whole.

This does not appear to be an appropriate environment into which to channel compulsory saving. Costs must come down and governance structures considerably improved, both of which call for considerable simplification of the system. Products would need to come under a separate set of regulations, driving this simplification through a system of standardization. Regulatory practice would need to be much more proactive, supported by the likelihood of a relatively low number of providers.

Considerable skills vest within existing regulatory structures. However, it would seem clear that, for a mandatory saving system, those entities providing administration and investment services to citizens forced to save for their retirement will have to be regulated under a different system, either inside or outside of the FSB, with a distinct focus.

[8] In the large majority of countries introducing mandatory individual accounts, the system was introduced in response to bankruptcy or mismanagement of its predecessor, an unfunded social security arrangement.

[9] This model is not unprecedented. Sweden, Latvia and Kazakhstan provide examples of countries in which defined contributions default to the public-sector provider, with the right for savers to opt out to a private-sector alternative. Kazakhstan provides an interesting model of such a system because members initially opted mostly for the state fund but have gradually exercised their right to select from among the 15 private-sector alternatives as their confidence in the system has improved (Hinz et al. 2005).

[10] Special consideration may need to be given to an order to close an administrator where the order is directed at the GSRF, quite possible under the regulatory environment contemplated in this document. To avoid this complexity, sanctions are more likely to be implemented against managers of the respective providers rather than the providers themselves. This is much easier to carry out in a manner that is consistent across public- and private-sector providers.

Public-sector default fund

Readers are reminded of the proposed mechanism by which mandatory contributions are allocated to managers. The default manager is the public-sector entity, the Government Sponsored Retirement Fund (GSRF). Private-sector administrators are selected by those participants who would prefer to opt out of the default and invest contributions in products provided by accredited private-sector managers.[9]

The system of regulation and supervision described in this paper would be ineffective if it failed to cover those individuals who elect not to invest in the private sector. The terms and conditions proposed for managers, and as far as possible the sanctions for non-compliance, apply as much to the GSRF as to the accredited private-sector entities. Failure to apply these principles with consistency creates unfair competitive advantage for the public-sector entity.[10]

But special terms may need to be added to those that apply to private-sector entities, mainly to safeguard against the possibility of unfair business practices on the part of the state-owned entity – for example, insufficient attention being given to the management of risk. If regulations include the possibility of closing and administering a provider in circumstances of dire need, how might these apply equally to the public-sector entity? Further thought should be given to these issues.

Establishing the regulator

It is important that the authority responsible for regulating this industry has sufficient power and independence to carry out its responsibilities effectively. The author does not have particularly strong views, at this stage, on whether the regulator should fall within or outside of the FSB, but recommends that, if it cannot meet the following requirements within the FSB, serious consideration be given to establishing a separate unit:

- **Reporting.** Since the regulator needs to be accountable to government, it should fall under the responsibility of a government minister, but the minister in question should have no power over the regulator, as discussed below.
- **Hiring and firing.** While reporting functions can fall under a government department, a minister should not have the power to either hire or dismiss members of the executive. It is recommended that the minister to whom the regulator reports can nominate new members of the executive, or recommend the dismissal of existing members, but that this must be approved by another cabinet minister and ratified by the cabinet. This is discussed further in section 2.3, where it is recommended that the regulatory and supervisory authority[11] is headed by an executive and guided by an advisory board, whose members are nominated by the relevant minister, approved by a specified second minister and ratified by the cabinet.
- **Funding.** It is important that the source of funding does not introduce the potential to influence the regulatory process or undermine the independent authority of the regulator. The FSB is currently funded by levies on its regulated entities. This is not a perfect system but it removes some of the potential for gaming that alternative systems might introduce. It is recommended that a similar system be introduced in this case. While a levy system is supported, ultimately, by the members, a mandatory defined contribution system would result in a very large number of members sharing the financial burden of the regulator.
- **Compensation of staff.** Some countries write parameters that establish the remuneration of office-bearers and professionals in the regulatory authority to ensure that they remain competitive.[12]
- **Complaint authorities.** It is not clear whether the Pension Funds Adjudicator (PFA) should have authority to rule on complaints in this system. Whether the PFA is appointed the complaint authority or another entity is established, such an authority must have administrative and financial independence from the minister to whom it reports and the regulatory authority that it works alongside.

At the same time, it is important to avoid establishing a separate regulator unnecessarily. All regulatory modifications must be subject to proper appraisal of the costs and benefits, as referred to by the state president in his State of the Nation Address, 9 February 2007.[13]

Policyholder protection

> Life is not fair. But there can be few crueller fates than that suffered by those who spend their entire career contributing to a company pension scheme only to find their retirement plans ruined by the business's financial difficulties. (Financial Times, October 2005)[14]

The risk of failure in the current regulatory system falls on households. There is no underwriting mechanism to provide protection against or financial compensation for provider failure. An argument exists that, no matter how strong the regulatory environment, reliance cannot be placed exclusively on preventing failures because of the financial impact on individuals of the possibility of such failures.

Consideration should thus be given to the possibility of some overarching financial protection for participating individuals, an insurance safety net, but it needs to be structured in such a way that it avoids creating perverse incentives or distortions of the market mechanisms. Some lessons from abroad may be helpful.

The **United Kingdom** has established a fund, called the Pension Protection Fund, to compensate members of defined benefit retirement plans that are under-funded and whose employers are insolvent (Dasgupta, 2006). The objectives of the fund are to compensate those who, by virtue of circumstances beyond their control, face potential poverty, and to increase public confidence in defined benefit schemes. The arrangement is funded through levies on all defined benefit funds. One of the main objections to

[11] For the avoidance of doubt, this is expected to be the same entity. Though a number of government departments may have input to policy and thus be said to be participating in regulation, the intention is that regulation and supervision vests in a single authority.

[12] The law in Argentina states that the average wage in the supervisory agency must exceed the average wage paid by the top 50% of providers (Demarco et al.. 1998), presumably with some allowance for adjustment for differences in job types.

[13] Few would argue that the United Kingdom has a poor regulatory system of pension funds and financial services providers, but it has recently announced a process of reviewing the need for the full range of regulatory, mediation and compensation organizations currently in place (Thornton 2007).

[14] Quoted in Dasgupta (2006).

the system is that soundly managed funds subsidize those with weaker management and those taking undue financial risk. This concern has been addressed through the introduction of a risk-based levy, creating incentives to reduce risk. The fund has not been in existence long enough to judge its effectiveness or financial stability.

The **United States** also has a fund designed to provide protection to the members of defined benefit to cover the risk of the loss of benefits in the event of employer insolvency. This fund, which has been in existence for longer than its UK counterpart, is called the Pension Benefit Guaranty Corporation. Levies to the fund are also based on the financial position of participating funds, but more directly on the current position rather than a composite of a variety of risk factors.[15]

A key problem with funds like these is the enormous accumulation of risk that it may bear as a provider of last resort and the need for it to push this risk back to the retirement plans that it covers (Schieber 2003). In the United States, the flat-rate contributions per member increased, in 2006, from $19 per participant annually to $30 (Deloitte 2006: 35). The PPF in the United Kingdom recently announced that it plans to raise approximately £675 million in levies in financial year 2007/08, more than double the previous levy – unsurprisingly to the dismay of commentators.[16]

Protection of participants does not have to take the form of an insurance arrangement. Protection in **Chile** is provided in two forms: investment returns from pension funds that, relative to their peers, meet certain standards, and a government safety net. The safety net applies to members who, subject to having contributed for 20 years, fail to accumulate enough to support a pension above a stipulated level, and to members who, drawing down their retirement capital on the stipulated basis, reduce the pension that may be funded by the capital to below this stipulated level. But it also applies to the members of failed private-sector providers. Under these conditions the state guarantees a specified set of benefits. Since government itself provides this protection, as part of a larger commitment to minimum levels of social security benefits, the system does not introduce the potential for distortions or perverse incentives to the same extent as its counterparts in the UK and US, but it certainly is not free of risks.

Protecting the participants of a system takes a variety of forms. It is urged that last-resort insurance be considered as a possibility, but note the potential for distortions that such an arrangement might introduce. A number of system models exist around the world and should be considered in detail to determine their potential for South Africa.

Concluding comments

> Whilst regulation has traditionally focused on the prudential soundness of insurers, there is an increasing need for regulation that focuses more directly on issues of consumer protection, including the conduct of providers and intermediaries as well as the features of the products they sell. (National Treasury 2006: 7)

We are quite clearly in an environment of change. The policymaker and regulator have recognized the need for change and are implementing modifications to existing structures that serve to strengthen the extent to which they lead to increased levels of consumer protection.

It is argued here that such changes do not go far enough in providing this protection in an environment underpinned by mandatory contributions. The conduct of providers and intermediaries and the features of the products that they sell most certainly fall within the scope of the regulatory framework proposed by this document.

2.2 Governance principles

Governance is the framework of the retirement system that imposes checks and balances on the roles played by all parties to a retirement arrangement and provides security of the accumulated savings and the benefits in a retirement fund.

Governance should be considered at two levels. The foundation of a good system is the set of principles describing the fundamental characteristics of the system, such as

- who bears responsibility for the security of retirement savings,
- what the obligations of these parties are, and
- how they ought to relate to other parties to the fund such as service providers and the regulator and, most importantly, the current members and the beneficiaries.

But the principles can only go so far. A governance system that complies with these principles can be implemented in practice in a variety of ways. The principles are set out here, but some of these practical implications are considered in more detail in section 3.

International precedent & discussion of options

Two primary sources are used as input information to the task of drafting a set of governance principles. The private pensions unit of the Organisation for Economic Co-operation and Development (OECD) pays significant attention to the issue of governance. It carries out research into the practices of the 30 member countries of the Organisation and a number of others, and translates this work into a set of principles that apply to occupational arrangements and those covered by the type of personal pension systems contemplated in this paper.

The Canadian Association of Pension Supervisory Authorities has also paid significant attention to defining the code of practice that should determine how parties responsible to a pension arrangement should carry out their duties. A draft for comment (CAPSA, 2001) was followed by a set of guidelines (2004).

These documents have been summarized in Appendix 1 for information and they are used in the section that follows to put

[15] "Pension plans insured by the PBGC pay both a flat-rate, per-participant premium and a variable rate premium equal to 0.9 percent of unfunded vested benefits" (Deloitte 2006: 19). The transparent approach may be clearer to retirement plans, but leaves open the possibility of some form of gaming, based on distortions in the regulated assessment of funding levels.

[16] For example, Daniel Brookshank, writing for Investment & Pensions Europe, 21 December 2006, www.ipe.com.

forward a proposed set of principles governing the accredited arrangements.

Recommendations

The following principles are proposed as crucial to the effective operation of the system of accredited providers. The legal entities into which member contributions are deposited are *mutual pension funds* (MPFs), owned by their members, and managed by *accredited retirement institutions* (ARIs), to distinguish them from existing pension, provident and preservation funds. As in today's collective investments environment, the ARI is a management company mandated by the owners of the fund to manage its assets on a contracted set of terms and fees.

The recommendations set out below apply to the ARIs, which are themselves legally separated from any shareholding corporate entities like today's life insurers or asset managers.

1. **Trustees.** Every ARI is subject to the oversight of a Board of Trustees, subject to the provisions of South Africa's trust law. The members of the Board must exercise due care in carrying out their duties to members, beneficiaries and the regulator.
2. **Written objectives and identification of responsibilities.** The Board must identify and document the governance objectives of the ARI and it must identify and assign operational and oversight responsibility to each of its members and all of its service providers. Both of these – and any changes to these – should be communicated to members, beneficiaries, employers, the regulator and to any bargaining agents that have an interest in the fund. The governance framework must be reviewed from time to time, no less frequently than once every three years. The governance objectives must be supported by a code of minimum suitability standards and a proposal covering succession planning and the selection and appointment of new members.
3. **Reporting.** Reporting channels between all parties involved in the administration of the ARI must be established and documented to ensure effective transmission of information and smooth administration of the ARI.
4. **Skills, auditing and actuarial services.** The Board must, collectively, have the skills required to carry out its responsibilities with confidence. It must identify and obtain the services of suitable external advisers to provide advice in those areas in which the Board does not have sufficient skill. External auditors, with whistle-blowing responsibilities, must be appointed to provide an assessment of the finances of the fund. An actuary, also with whistle-blowing responsibilities, should be appointed if regarded by the Board as appropriate to the needs of the fund and mitigation of its risks.
5. **Code of conduct and conflict of interest.** The Board must establish a code of conduct and an approach to the identification and management of conflicts of interest. This must be written and be made available to the parties in item 2, on request. Active monitoring of adherence to the code and monitoring of potential conflicts must be demonstrated by the Board.
6. **Transparency and accountability.** The Board must establish and document a plan for communication of all relevant aspects of the ARI to its members, beneficiaries and the regulator and other relevant parties. This must comply with the set of disclosure requirements set out in regulation and should exceed this where the Board has any doubt concerning whether these requirements are sufficient to meet its fiduciary responsibility to any party with an interest in the success of the ARI. The Board should be legally liable for its actions, as should each of its members.
7. **Performance measures.** The Board must establish a code of performance standards for itself and all service providers and advisers to the ARI and carry out a formal assessment of the extent to which these performance standards are achieved at least once a year. The code must include provision for redress in the event of failure to meet the required standards.
8. **Risk management.** The Board must assess and document the risks to which the ARI and its members and beneficiaries are exposed and establish a set of actions to provide appropriate levels of protection against these risks. The risk-management plan and the extent to which mitigation is in place must be reassessed every year.
9. **Access to information.** The Board must ensure that it has, at all times, clear and timely access to any information required in the execution of its duties and that its advisers have similar standards of access, according to their needs. All information should be provided directly from the originating source.
10. **Oversight and compliance.** Appropriate mechanisms to oversee and ensure compliance with the legislative requirements governing ARIs must be established and documented.
11. **Custodian.** Custody of ARI assets must be carried out by an independent custodian, who must keep separate the ARI assets from its own, may not entrust the assets to a third party and is required to take on whistle-blowing responsibilities.[17]
12. **Redress.** Pension plan members and beneficiaries must be granted appropriate levels of access to statutory redress mechanisms. The existence and operation of these mechanisms must be included in communications to members at least once a year.

Governance is receiving considerable attention around the world and global absolutes are difficult to pin down, as demonstrated by a confidential OECD paper (2005b) that surveys the changes introduced by a number of countries.

[17] The assets of the fund are, in the first place, legally separated from those of its administrator and all sponsoring employers. The model of ownership most strong supported is that of mutual ownership by the members, as in South Africa's collective investments environment (see discussion in section 5.1).

For example, governance rules should not restrict the corporate form of the administrator, unless such a restriction is appropriate. The Australian Superannuation environment, while not perfect from the perspective of managing conflict of interests, has the flexibility to allow both non-profit and shareholder-owned pension fund administrators. Refer to the case study in Appendix 6.

Establishing a market that competes on the basis of the security offered to members is also important. At a regulatory level, a number of principles are sufficient to put in place minimum standards but not to protect members to the greatest extent possible. The position taken here is that protection is difficult to enforce through a set of rules and that the market needs to embrace good governance and give it the standing of a competitive differentiator. The ways in which this might be done are the subject of section 3 of this paper.

Finally, separate attention needs to be given to the form of governance of the MPF itself. A variety of working models are in successful use around the world. In all Latin American countries except Mexico, pension funds are owned by their members, legally separate from the fund administrators. The authorities in Mexico have taken this one step further: funds in that country are independent legal entities with their own boards of directors. The model of legal separation and mutual ownership by fund members is supported at this stage, as suggested by the term Mutual Pension Fund, but consideration should be given to the additional support of a separate board of directors for the MPF.

2.3 Supervisory responsibilities

The earlier discussion makes clear the view that the regulatory system envisaged for members' opt-out savings needs to be substantively different from the existing system. The number of providers would be significantly lower, the scale in each higher and the consequences of failure much higher. A more proactive approach is called for, founded on the regulator provision of the type of information to the supervisor that would allow early signals of non-compliance or financial difficulties to be identified.

> Private pension funds have now successfully been implemented in a wide range of settings and circumstances. The extent of variation observed in the structure and operation of supervisory programs throughout the world inevitably raises questions about optimal design and best practices. Commonality of objectives suggests greater similarity in approaches than is evident in experience. Despite this variation in organization and practice there is, at present, no compelling evidence of the inherent superiority of any one type or style of pension supervision. This suggests that differences in the organization and operation of pension supervision programs are substantially a function of the extent to which they are aligned with the environment in which they operate. (Hinz & Mataoanu 2005: 4)

The supervision of financial services markets is a complex yet under-researched subject. As these World Bank researchers suggest, there is no single perfect model. The discussion below is not intended to be prescriptive, but to open the debate with a proposed set of characteristics of the supervisory infrastructure by referring to insights gained from around the world.

Guidelines on form

The World Bank (2005; headings below quoted from page 172) allocates possible supervisory responsibilities into two sets. The less controversial rules and tasks for the supervisory body, with comments on their application to South Africa, include the following:

- **The need for a politically independent, proactive, well-financed and professional staff.** This almost goes without saying but is frequently not implemented with the diligence that it deserves. It is discussed in more detail in section 2.1.
- **The vetting of the application for licensing.** A key responsibility of the supervisory authority is to determine whether applications to provide service to the industry are approved or not. This is discussed in section 2.4.
- **The undertaking of off-site surveillance and on-site inspection**. The supervisor must be established with sufficient power to satisfy itself that the operations of the provider are compliant with legislated requirements and provide sufficient protection of the financial interests of participants.
- **The elaboration and issuance of regulations.** The system is to be launched with a set of empowering regulations, but these cannot be regarded as static. The supervisor is in the best position to motivate modifications to these regulations and should be given sufficient authority to do so effectively.
- **The consistent and timely application of sanctions to rectify problems and establish a credible deterrent to abusive practices**. Sanctions must be enforceable in order for them to be effective. The supervisor must have the power to impose these sanctions. Refer to the discussion in section 2.8.
- **The publication of reports and statistics.** This is an increasingly important responsibility of the supervisor, particularly in an environment in which consumer education and knowledge of the salient product facts are so important. The supervisor should play a strong and active role in the provision of both industry statistics and product information, including comparative charging and performance statistics. This requires it to invest in taking a strong public role in the system.
- **Collaboration with other regulators**. Whether the supervisor of this industry falls within or outside of the FSB, it must establish strong co-operation agreements with all other members of South Africa's regulatory framework.

Some of the more controversial rules and tasks that some supervisory bodies might consider are not directly relevant to

South Africa. The list of possibilities set out by the World Bank (2005, with headings below quoted from page 172):

- **Establishment of effective collaboration with other regulators and supervisors for the many institutions offering retirement-income products.** This need not be a controversial issue. Whether or not the supervisor of accredited providers falls within the Financial Services Board, it must make sure that it co-operates effectively with all other supervisors of retirement products, despite the fact that the approach to supervising these providers is likely to be far more proactive in nature. Among the many reasons for this, two stand out. Firstly, the more stringent standards applied in this environment may provide useful information to supervisors of other pension vehicles. Second, there is likely to be considerable overlap of providers, with most or all accredited entities offering voluntary pension savings products as well.
- **The best way to guarantee the independence of the supervisory body in a weak political environment.** We do not have a weak political environment, but this must still be given proper attention, as discussed in section 2.1, not least to provide ongoing protection to system participants into an uncertain future.
- **Oversight and accountability of the supervisor.** Independence of the supervisor is not negotiable, but accountability is still required, most logically to the minister leading the government department under which the supervisor falls. One option is to mandate independence of a specified proportion of the members of the governing council of the supervisor. Another is to hold the supervisor accountable to a board of advisers, itself required to report to the minister. These are both supported. Yet another possibility is to have the supervisor answerable to a group of departments, for example, the Social Cluster, the National Treasury and the Presidency. This could become rather complex. All things considered, it is recommended that the supervisor is run by an executive and guided by an advisory committee. The members of both of these teams must be nominated by the responsible minister, approved by another specified minister and approved by cabinet. The same process applies to appointment and dismissal.[18]
- **Creation of a single-purpose or dedicated supervisory agency**. This paper makes the case for a supervisory entity with a particular focus on accredited pension providers. It neither suggests that this entity should fall under the FSB nor recommends against it, but it strongly supports the view that this environment is sufficiently distinct from others already in existence to warrant a dedicated supervisory team.

Some of the advantages and disadvantages of a separate regulatory entity are best set out by the World Bank. The discussion is closed with a quotation from this institution.

> Often the threshold decision related to the supervision of funded pensions is whether to establish this as an independent authority (as in Chile and most Latin American countries) or to integrate these functions with the supervision of similar financial entities, such as banks and insurance companies (as in Australia, Hungary, and the United Kingdom, among others). Both models have proven to be effective in achieving the objective of sound and reliable supervision, so there is no simple answer to the organizational question.
>
> The appropriate approach is likely to be a function of the design of the system and effectiveness of existing supervisory bodies. Pension funds that operate in a highly specialized manner as very distinctive financial institutions can be effectively supervised by independent authorities, while those that function as adjuncts to existing financial institutions are best addressed by an agency with integrated authority.
>
> ***The form of the institution is secondary to the independence, adequacy of resources, quality of staff, and clarity of mandate.*** The most compelling impetus for an integrated supervisor is the need for consistency and coordination of oversight across similar financial institutions, which are much better facilitated in a single authority. A central counterargument is that an integrated supervisor with a weak governance structure will face conflicts of interest in controlling the activities of institutions within its authority that compete or play multiple roles in a pension system (for example, asset managers, banks, and insurance companies) or be weakened in its ability to protect the system in the face of competing priorities. (World Bank 2005: 172– 173; emphasis added, paragraph breaks introduced in the interest of clarity)

What the supervisor does and how well it is skilled is more important than how it is structured.

Guidelines on structure

Much of the experience of individual-account regulators from around the world is relevant to our purposes. Some of the lessons from these countries are discussed here.

Hinz and Mataoatu (2005) list the primary elements of supervision as:

- licensing,
- monitoring,
- communication,
- analysis,
- intervention, and
- correction.

More detailed recommendations on these elements form the bulk of sections 0 to 0 of this document.

Demarco et al. (1998) provide a detailed set of guidelines on the principles of good supervision. These are based largely on the

[18] This does not rule out the possibility that the authority responsible for supervising the accredited provider environment falls under the existing FSB infrastructure, but it is strongly urged that the framework for ensuring the independence of the supervisory authority is clearly safeguarded.

strict Latin American model, so they illustrate perhaps the most detailed set of activities available.

The authors suggest that the supervisory authority should be headed by a director, with full powers to apply regulations and issue new ones, with an advisory board that does not limit the decision-making ability of the director. They go on to recommend three operational divisions and a supporting infrastructure, responsible for information technology, administration and human resources. The three operational divisions should be responsible for:

- the **control of provider activities**, with departments covering
- institutional issues, such as licensing and bookkeeping,
- financial issues, like investment limits, returns and guarantees,
- membership issues, for example, joining funds, transfers and claims, and,
- benefit payments – that is, the calculation of annuities and both disability and survivor benefits;
- **statistics and research**, with publication facilities;[19]
- **legal affairs**, with departments responsible for
- sanctions, and
- legal advice, including complaints

The authors also provide detailed information on the key areas of supervisory responsibility under the headings institutional control, financial control, membership and benefits, information and legal issues.[20]

SFPA (2003) provides analogous details on the main functions and the divisional structure of the Chilean Superintendency.[21]

Evidence on the cost of supervision

Almost invariably providers argue that the supervisory structure is expensive, increasing the cost to members. Demarco and his colleagues (1998) show that costs can be relatively high in the early years of a system but are likely to be much lower as the system reaches maturity. Table 1 shows the cost, in the late 1990s, of running a number of supervisory authorities.

Some would argue that these figures do not represent the full cost of supervision, suggesting that compliance activities carried out by providers and intermediaries add to the cost borne, ultimately, by the member. The counter to this position is that the large majority of these activities would be carried out by a diligent provider in any case.

These figures support the view that regulation along the lines put forward in this paper can be carried out at reasonable cost to participants.

Table 1. Performance indicators for selected Latin American supervisors

	Launch year	Employees	Budget	Employees per million participants	Employees per provider	Budget / assets	Budget contributions
Argentina	1994	183	$ 12.5m	30.5	10.2	0.14%	0.36%
Chile	1981	134	$ 7.0m	23.2	10.1	0.02%	0.28%
Colombia	1994	30	-	11.9	3.3	-	-
Mexico	1997	214	$ 26.3m	19.1	12.6	0.42%	0.95%
Peru	1993	85	$ 5.1m	73.9	14.2	0.34%	1.23%
Uruguay	1996	21	-	45.7	4.2	-	-

The authors do not indicate the year to which these figures apply, but it is most likely, based on their publication date, to be 1997. Sources: FIAP (2007) for launch dates and Demarco et al. (1998) for all other information.

Communication by the supervisor

A clear commitment of supervisory resources to communication to participants has a number of benefits, among them:

- improving product comparability,
- increasing the understanding of participants,
- aligning the interests of providers to their customers, since these providers must compete on the basis of issues that really matter to participants.

A growing number of supervisors, both in mandatory national individual account systems and outside of these countries, take communication seriously. This should take a number of forms, for example:

- public profile on policy and monitoring issues,
- regular overviews on the industry, its supervisory challenges and the manner in which these challenges are being met, not only in formal annual reporting, but also in much more regular communication at the level of the participant,[22]
- industry statistics and comparisons that enable participants to exercise choices with the benefit of independently produced and verified information.

[19] A publication facility must include the capability to provide consumer-friendly information, on paper and electronically, that educates customers on the environment and informs them about the available products. Refer to the discussion on this subject at the end of this section.

[20] Interested readers are referred to pages 17 to 47 of that paper. The detail is useful. Provider inspections, for example, can be broken down into activities covering the control of individual accounts, information to members and beneficiaries, accounting practices, the registration of participants, documentation on investments and reserves, the operations at providers' branches, the complaints and claim procedures, and verification of payments to third parties like providers of survivor benefits.

[21] Chapter 4, section 3, pages 55 to 59.

[22] The FSB currently produces a number of formal and informal reports. A special focus on savings in accredited providers is definitely required on the formal side, but informal communication channels for this market are worth serious consideration as well.

The Chilean regulator produces numerical information which is requires providers to send to their participants three times a year (see section 4.8 for a description of this information). Argentina, along with other Latin American authorities, provides comparative statistics to participants via the internet. The United Kingdom does the same, despite the greater inherent complexity of its financial services environment.[23]

Clear communication of industry information is an important element of the proactive ethos recommended for the supervisor of the accredited provider market.

Variations within the fundamentals

The paper sets out what is believed to be the best framework for a proactive system of regulation appropriate to a relatively low number of providers each with substantial scale. Before moving on to a discussion of some of the details of the proposed supervisory activities, it is noted that:

- the real world is more complex than can be managed with an 'either-or' approach, and
- an inflexible, extreme position often produces undesirable outcomes.

Hinz and Mataoatu (2005) list the following characteristics of, on the left, an intensely constrained system and, on the right, a considerably less conservative approach:

- restrictive - open
- proactive - reactive
- comprehensive - exception-based
- directive - negotiated
- corrective - deterrent

While an ethos learning towards the left-hand side is recommended in this paper, further thought should be given to the detail of the supervision along the lines of each of the characteristics.

2.4 Registration

All regulators, in all parts of the financial services spectrum, specify requirements of product providers on registration. They do so in two main areas. The first is a set of capital requirements, to ensure that customers are protected by a capital buffer in case of financial difficulty. The second is a set of criteria for authorization, most commonly including a business plan providing specified details.[24] A number of other requirements often supplement these two primary thrusts.

OECD recommendations

A draft discussion document by the pension policy unit of the OECD (2006a) suggests the following elements for the registration of private-sector providers of pension products:

- **Legal provisions** must be in place for licensing pension entities with the relevant authorities, for the licence to be withdrawn under certain circumstances and for the right of entities to appeal withdrawal decisions.
- **Governing documents** describing the pension plan's objective, governance structure and outsourcing provisions must be drafted and submitted.
- A **risk-control** mechanism must be in place, together with **internal-reporting and auditing** plans.
- Defined benefit arrangements must have a **funding policy** and entities responsible for managing multiple arrangements must have **separate policies** for each of these.[25]
- The pension entity must have a **governance** policy and must keep separate those staff responsible for investments and those responsible for settlement and bookkeeping.
- The **business plan** should include a description of the funds that the entity is to manage, the types of obligations that the entity is expected to incur, the setting-up costs and means to raise finance and the projected development of the business.
- Where a pension entity is incorporated[26] it must have access to adequate resources. This is most often enforced by requiring the entity to hold at least a specified amount of unencumbered capital, which should not be used to cover start-up costs and often must be separately housed as a deposit. **Capital requirements** are particularly relevant for entities taking on insurance risk, but are standard procedure in many countries also for product providers not taking on such risk.

The discussion document goes on to recommend steps for establishing the role of the licensing and supervisory authorities, suggesting that:

- the legal provisions should set out with clarity the procedure for applying for a licence,
- the licensing authority should have the power to undertake all of the steps necessary to assess the application thoroughly, together with some flexibility to take case-specific peculiarities into account, and that it should provide guidelines to prospective applicants helping them to understand how they can best meet their obligations, and that
- the licensing authority should have properly established power to reject an application, modify the terms of a license or withdraw a licence, and that it should have a mechanism in place to review the modification or withdrawal of a licence on application by the pension entity.

These recommendations, and any modifications that follow from them, should form the minimum standard for the licensing framework under the accreditation arrangements for the South African mandatory defined contribution system.

Mexico provides practical illustration of these principles. Quoted below is correspondence received from David Madero, General

[23] The Argentine and UK information is available at www.safjp.gov.ar/SISAFJP/Informes+Periódicos/Comisiones/ and at www.fsa.gov.uk/tables.

[24] In some instances a lighter approach to licensing may be more limited, most often to facilitate the establishment of pension schemes in the country concerned. But in such instances "… it is critical that a well-developed and effective ongoing legal regime be in place in order to promote a similar level of protection of pension entities as the one that can be achieved through the implementation of these guidelines" (OECD draft discussion document 2006: 4).

[25] This paper does not envisage defined benefit arrangements falling under the opt-out arrangements, but similar principles could be extended to the provision of insurance cover, which may also fall under the responsibility of accredited providers.

[26] That is, the pension entity has shareholders, which is the case for pension management companies and most likely for the ARIs envisaged in this paper.

Co-ordinator of Economic Studies at CONSAR, regulator of the Mexican mandatory individual account system, describing the licensing requirements (AFORE is the term given to a provider under the system):

> The AFOREs must present a request to CONSAR in order to obtain the license. The request must be submitted along with the general data of the company (including the background of the applicants); it is also required to present a governance plan and several operations programs including the dissemination of information, and the program of capitalization and reinvestment of profits. A feasibility study must be submitted as well. The fees the AFORE will charge to its clients has to be approved by the Pensions Board *(Junta de Gobierno)* which is formed by Federal Government, Central Bank, Social Security, and Labour and Employers sectors representatives. (CONSAR 2007)

Capital requirements

Regulators of the mandatory individual account systems of Latin America set minimum capital requirements for providers. The required capital on deposit varies across countries as shown in Table 2.

Recommending a complete set of capital requirements is beyond the scope of this paper and should be considered in conjunction with similar requirements for existing arrangements. What is clear is that separately registered ARIs would be required to put up sufficient capital to provide reasonable levels of protection to their members.

Regulating the intermediary channel

The regulatory framework for most individual account systems includes rules governing the behaviour of independent advisers and tied sales intermediaries. The Mexican system, for example, includes a set of rules to which all sales agents are subject (regulation 05-7, CONSAR, 2007).

South Africa has recently promulgated legislation, the Financial Advisory and Intermediary Services (FAIS) Act, 2002, designed to regulate the behaviour of intermediaries. Monitoring compliance with the Act is the responsibility of a department of the FSB.

Establishing a market with accredited entities providing regulated products ought to reduce the need for regulation of advice, not least because of the considerable pressure on commission scales. It would be incorrect, however, to believe that the need for advice disappears or that advisers would no longer have incentives to frame consumer decisions in a manner that benefits them rather than their customers. Furthermore, the market for voluntary provision will remain vibrant and customers will continue to need financial advice.

Table 2. Capital requirements in Latin American mandatory individual account systems

	Reserve	Notes
Argentina	USD 3 000 000	Required stability reserve higher than in other Latin American countries
Chile	20 000 UF[27]	Strongly outweighed by the stabilization reserve backing the minimum return guarantee
Colombia	USD 4 000 000	Contributions also required to financial sector guarantee fund
El Salvador	USD 570 000	Five firms established by time of Queisser had five times this capital at set up
Mexico	USD 3 000 000	Special stabilization reserve of approximately the same amount must be held and each investment fund must hold a minimum reserve
Peru	USD 200 000	More may be required if fund investments are risky
Uruguay	60 000 a/c units	Roughly equivalent in mid-1995 to USD1m

Sources: Queisser (1998), CONSAR (2007), Rocha & Thorburn (2007)

Notes: most Latin American providers must hold stabilisation reserves as well, to support the requirement that returns at least as great as the stipulated minimum are granted each year.

Investment managers in Hong Kong must meet stipulated capital requirements of HK$ 10 million,[28] but they are not entities registered solely to provide asset management services to Hong Kong Mandatory Provident Fund system (MPFA, 2007).

The managers of Australian superannuation funds, referred to as trustees, must meet capital requirements where the fund is not employer-sponsored. The stipulated requirement is AUS$ 5 million[29] but the requirement can be met in various ways, through an approved bank guarantee, for example, or through an external custodian meeting the requirement.[30]

It is recommended, at this early stage in discussions concerning system design, that the framework established by this legislation, and its supporting regulatory and supervisory infrastructure, be regarded as foundational for what might be required under the accredited environment. Modifications to this infrastructure should be considered as part of the process of designing the system of accredited advisers in more detail.

[27] The UF, or unidad de fomento, is the monetary unit for all pension payments and is indexed to the consumer price index. The level of 20 000 UF, around USD 500 000, is a maximum for providers with a high number of members; new entrants are required only to deposit 5 000 UF, approximately USD 130 000.

[28] This is equivalent to just over USD 1 275 000 at March 2007 exchange rates.

[29] This is just over USD 4 000 000 at March 2007 exchange rates.

[30] This information was obtained through direct correspondence with the Australian authorities.

2.5 Premium collection mechanism

Appendix 2 provides a full discussion of the issues around premium collection.

It asks whether contributions should be collected centrally or by the accredited providers. It also asks, assuming that they are collected centrally, whether providers should manage assets on a wholesale 'blind account' basis, without any knowledge of who has chosen to divert assets to them, or whether they should manage on the retail 'individual-account' basis, giving them access to their clients, but also an explicit responsibility to service them.

Recommendation

The discussion in Appendix 2 ends with a recommendation that, in the circumstances contemplated for the pay-as-you-go and individual account systems, contributions under the defined contribution portion should be:

- collected centrally through the Government Sponsored Retirement (GSRF), though the collection agency itself could be the South African Revenue Services (SARS),
- in the absence of any instruction from the member to the contrary, transferred to the default fund, and,
- where the member has elected to redirect contributions to an accredited provider, transferred directly to an account in the name of the member, managed by the provider concerned.

Benefits

The proposed approach is intended to combine a number of advantages:

- contributions are collected as effectively as possible, using the same vehicle that collects the corresponding contributions under the mandatory arrangement on behalf of the GSRF, for example SARS,
- the GSRF takes the responsibility of central data manager, a natural role for it to play in combination with its responsibility to manage contributions and benefits under the mandatory system,
- bulk transfers are made to the public sector and all private-sector entities, together with the required data records, enabling scale efficiency to be retained, but
- accredited providers are entrusted with the responsibility to manage the assets entrusted to them, together with communication to savers and responsibility for managing payouts.

Spin-offs in the voluntary sector

Accredited providers should not rule out the potential for collecting contributions on an individual basis, as they are likely to be in a good position to seek business from the voluntary sector. The economies of scale developed as providers to the mandatory pillar and the effort required to meet the stringent governance and administrative requirements could be put to good use in the voluntary market, which should increase in efficiency as a result of the standards established for the accredited provider environment.

Consideration should be given to establishing the accreditation criteria for both wholesale and retail contribution collection in an effort to provide best-practice guidelines to third-pillar providers seeking to establish benchmark standards for their customers.

Third-party collection points

The Indian proposal envisages a separate layer of customer servicing outlets, what it refers to as POPs (Points of Presence), which would operate purely as contact points with customers to carry out a range of activities. Customers could open accounts, obtain information on their existing accounts and take receipt-of-benefit payments.

The motivation for this network is that it is much wider than can be established by pension providers themselves, because it includes banks, post offices and all types of deposit-taking institutions registered with the Indian pension authority as service providers to the system. The POPs would have direct access to the central database of all member details and act effectively as sub-contractors to the private-sector entity, the Central Recordkeeping Agency, or CRA, responsible for setting up and running this data-management system.

Such a system may be regarded as unnecessary at this stage, because of the premium collection mechanism that could piggy-back on the corresponding collection of contributions to the PAYG system, but the policymaking authorities would welcome proposals motivating the wider network of contacts that this would provide. It merits careful consideration if the PAYG system is not included as part of the reform package and it has the potential also to stimulate further saving in the voluntary, third-pillar environment.

2.6 Prudential management

The FSB is currently responsible for the prudential oversight of all non-banking financial service providers in South Africa. This form of oversight has been the chief responsibility of the FSB since its establishment. Though regulatory intervention under an opt-out system needs to extend to other areas like products and disclosure, prudential oversight remains a crucial responsibility of the supervisory authority.

Licensing

The registration and monitoring process set out in section 2.4 is one part of prudential regulation. The legal framework needs to establish the responsibility of the licensing authority (which may form part of the supervisor, but may also be separately established) and the obligations and power of this authority to make and review decisions and it should also make clear the framework for financing the licensing authority.

An important part of the licensing process is the capital deposit that helps to protect the fund participants against the adverse impacts of financial failure. The level of the deposit should be established from the outset but the supervisor may retain the right to vary the level of this deposit in the case of applicants with unusual characteristics. The establishing legislation should also provide flexibility for overall changes to the level of this deposit.

Prudential monitoring

The extent to which ongoing monitoring of the finances of the ARI is required depends significantly on the nature of the risks that it takes on. It is recommended that the supervisory entity consider the types of actions required to safeguard the finances of the pension provider, bearing in mind the imperative that the financial interests of participating members are very carefully guarded. It is submitted that the conditions that ARIs should be required to meet to demonstrate this attention to financial security should be much stricter than the corresponding conditions currently applying to insurers and pension providers.

Reporting requirements

Reporting is covered in many parts of this document. In section 4.7 the models for product disclosure to members and the general public are considered and section 4.8 asks what types of reporting information should be provided to investing members. Here the general point is made that the standards of report to the supervisory authority should be designed to support the objectives of the prudential regulation determined by the supervisor.

ARIs are also required to provide standardized information to the GSRF as part of their obligation to maintain the integrity of the database that consolidates the financial interests of all members in both the PAYG and DC elements of the mandatory system. The GSRF should specify these data obligations with precision at the outset of the system.

Actuarial reviews and external audits

ARIs are also expected to meet standards of due diligence. This certainly mandates an external audit by an accredited auditor. It may also imply review by a suitably qualified actuary, but in pure DC arrangements, it is not clear how much value an actuary adds to the process.

> The increasing importance of consulting actuaries is a key feature of pension fund governance in recent years. These can play an important role of pension fund management. However, recent accounting scandals in the United States have served as reminder that incentives matter in getting auditing done effectively – it is not merely an issue of mechanical checks. (Besley & Prat 2003: 6)

Any service provider needs to demonstrate independence from the recommendations that it makes. Incentives matter in all professional services, not just auditing. Actuaries, for example, must be very careful concerning the potential for conflicts of interest. The Myners review of Institutional Investment in the United Kingdom noted a highly concentrated investment consulting industry and a high frequency of instances under which actuarial advice and investment consulting were bundled together (Myners, 2001).

The Morris review of the actuarial profession notes that re-tendering for actuarial service occurs infrequently and that the bundling of multiple services is widespread, even in the absence of any provisions by providers to formalize such bundling. It also raises concerns with the high potential for conflicts of interest to affect the integrity of actuarial advice.

> Effective oversight of actuarial advice has been constrained by the limited degree of market testing, lack of widespread scrutiny, the extent of expertise amongst users and, in some cases, insufficiently transparent advice. This is further complicated by the extent of joint provision of related but distinct services, and by the increased scope for conflicts of interest to impinge on the work of scheme actuaries. (Morris 2004: 37)

Entrenching statutory responsibility to any professional grouping may increase the potential for undesirable market practice. It establishes a captive market, entrenching the strength of the profession concerned and it increases the potential for bundled services and conflicts of interest.

With this in mind, it is difficult to defend the position that regular actuarial review of defined contribution arrangements should be entrenched and it is considered inappropriate to require such review of accredited providers, particularly as they are likely to employ appropriate risk management resources in fulfilment of prudential regulatory requirements.

It is recommended that the governing body that bears fiduciary responsibility for the integrity of the ARI takes responsibility for determining the necessity of actuarial review, subject to the regulator retaining the right to mandate such actuarial review should this be deemed necessary.

Independent auditing of the accounts of ARIs is considered essential.

2.7 Number of players

What is the ideal number of market participants in the accredited opt-out environment?

> Concentration in the pension fund management industry is found to be higher in the new pension systems of Latin America and Eastern Europe than in most OECD countries. Concentration might be because the new pension markets are smaller than in countries with more established funded pension systems, but it could also be because of restrictions on industry structure. (Srinivas et al. 2000: 6)

An environment with a low number of providers gives each one of them economies of scale, assisting efficiency, but also creates the potential for collusion and other oligopolistic practices. This is worsened if barriers to entry are high, reducing the potential for new entrants to take advantage of unfair business or pricing practices. On the positive side, an industry with few providers presents a lower regulatory burden, all else being equal, and it is easier for customers to select from the available providers.

A higher number promotes better competition on price and product design, within the range of options permitted by regulation, but reduces the potential for economies of scale. Customers have a wider range of products to choose from but might find it more difficult to select the product that best meets their objectives. Regulation could be more complex or expensive, or the compliance resources available for each regulated entity could be lower.

The discussion in this section is linked to the thoughts expressed in a number of other areas. Section 5 considers the issue of investment choice and the impact of the range of products available. Appendix 3 discusses the potential for an auction process to produce an optimal outcome. In the discussion that follows, some of the sub-themes around the issue of provider numbers are considered.

Minimum number of providers

> The level of concentration of the Pension Funds is related to a considerable extent with the economies of scale existing in the industry. The social security administration industry presents significant economies of scale, and this favours the concentration of the sector. (SPFA 2003: 111)

Since some competition is a necessary requirement for the effective operation of the market, the founding regulation may stipulate that the system may not be established without at least a specified number of providers licensed to operate in the system.

This could be achieved in a number of ways. For example, if the initial conditions for operating in the market are such that very few firms deem the opportunity sufficiently profitable to enter, another round of applications could be opened with slightly weaker conditions for entry – for example, higher maximum charges. This type of action should not be entered into lightly because it changes the environment for those firms that have already indicated their determination to enter, reducing the potential market size for each of them. It may also undermine consumer confidence in the saving environment.

An auction system could be used to set the number of providers exactly, as is contemplated in India (see Appendix 3), or an initial round of market-testing could be used to establish the type of price at which providers would seriously consider entering the market. Each approach is prone to disadvantages. One of the generic difficulties with any strategy to establish a minimum number of providers is that it begs the question, assuming that the market is running at the stipulated minimum, of how the regulator should respond to the failure of one of the providers.

Setting and committing to a minimum number of providers appears to introduce the potential for significant difficulty. An alternative approach is to encourage the entry of new providers, even after the launch of the new system. The Mexican individual account system had, at February 2007, 21 providers, of which five had entered during the course of 2006. The regulatory authority does not compromise its standards or rules – all applicants are required to have their proposed prices approved by the regulator, for example – but it does encourage and assist the entry of new providers.

It does so in three principal ways:[31]

- **Cost level:** the operator of the central database, called Procesar, introduced corporate governance and technological improvements that reduced costs across the industry. Adding to this cost reduction was the decision to centralize in Procesar some of the processes until then carried out by the managers. The regulatory authorities stress that, together with the contribution collection service provided by the Mexican Social Security Institute, these initiatives are fundamental to efforts to improve the contestability of the market.
- **Default fund:** workers that do not choose a retirement fund manager within a stipulated time period are assigned every two months, by the regulator, to the managers that best meet certain conditions. The criterion used until recently is the fee, so the cheapest managers gain the new members.[32]
- **Cost mix:** primarily through the formula used to determine supervisory fees, the authorities are switching the emphasis from fixed costs to variable, making it easier for small companies and encouraging new entrants. The logic behind this initiative is that small firms should not pay a disproportionate part of the fees charged for using common infrastructure.

The proposal for India does not envisage any difficulty meeting minimum numbers of providers. The plan is to license six providers at launch and allow new entrants, one by one, as assets under management reach certain pre-specified levels. This suggests that any minimum number should be considered variable to allow for changes in market dynamics as the industry grows.

Minimum share of the market

Should the regulator intervene if providers lose customers and become too small to be viable? The proposal for India is that they should be closed if market share falls below 5% and their members transferred to the default manager.

This runs the risk of significant market distortion. Providers then have a strong interest in 'picking off' the customers of their weaker competitors, particularly those approaching the limit, with the potential to achieve significant gains in customer numbers when they are closed.

[31] This information has been obtained from direct correspondence between the author and the Mexican authorities.

[32] This has recently been changed, to the benefit of members. The criterion used in the new regulation is the net return over the preceding 36 months. This should encourage providers (1) to focus on the costs that they incur in the pursuit of investment return, but not exclusively on this measure, and (2) to avoid taking too short-term a view on investment returns, a strategy often detrimental to customers in the long run. The approach is heartily endorsed.

All else being equal, providers with fewer clients would be operating at lower profit margins because they must cover similar fixed costs. This dynamic is likely to drive consolidation of providers in any case, making a mandated minimum market share unnecessary and unhelpful.

Competitive forces

The experience in Latin America is that the number of providers reaches a peak at or soon after the launch of the mandatory system, declining quite rapidly thereafter as firms without the required economies of scale are absorbed by their competitors and then settling to a natural floor (OECD Social Policy Division 2006a).

Of course this trend can be interrupted by changes to the environment, as may be seen by the example of Chile (SPFA 2003). In 1981, the Chilean individual account system opened with twelve providers. This remained constant until 1985, when the merger of two of these entities brought the number of providers down to eleven.

In 1983 and 1987, the reserve requirements and minimum net worth requirement of providers were reduced. This had a significant stimulatory impact on the market. Three new providers opened their doors in 1986, 1988 and 1990 respectively, six more in 1992 and a further three in 1993. One more firm entered the market in 1994.

But by then the consolidation had started. One merger took place in 1993, three in 1995, three more in 1996 and four in 1998, followed by two more in 1999 and 2001 respectively. Together with the liquidations of firms that became bankrupt or were not in compliance with the minimum net worth requirements, this represented a period of significant increases in industry concentration.

By the time of writing SPFA (2003), there were only seven entities looking after 3.5 million contributors and nearly USD37 billion in assets. Two of these seven providers each managed less than 3% of the assets or members. Now there are six.

Analysis of the operating costs of providers shows clear evidence of economies of scale, but the benefits of these economies are now unevenly distributed. The success of the regulators in stemming the expensive switching of participants from one provider to another may have succeeded in entrenching the competitive advantages of the dominant players, the largest of which now has 42.4% of all contributors on books.

Similar experiences characterize other systems. The Czech Republic is unusual among its peers in not having established mandatory saving. It depends on a reasonably strong voluntary saving industry, which half of the workforce was saving into by the end of 2000 (Lasagabaster et al. 2002). Starting out with 44 providers more than ten years ago, a recent merger announcement is set to reduce this to nine.[33]

What is clear from this description is that the accredited industry can be expected to be characterized by oligopolistic characteristics, making it very important that regulation caters for the difficulties to which this gives rise. The Competition Commission should also be involved in establishing the regulation that governs this industry and in working with the regulator to assess applications for mergers.

Concluding comments

The World Bank suggests[34] that, across its experience of many countries, the number of providers has proved to be less significant a driver of system performance as the way that these providers are structured to enhance competition in the legal and supervisory framework. Giving excessive attention to a target number would therefore be inappropriate if it resulted in insufficient focus being given to the other issues discussed in this paper.

Regulating minimum market share or member levels appears to be unnecessary and counterproductive. It is recommended that the controls should be implemented primarily through the application of a strict set of standards, including possible charge ceilings, which would force financial sector firms to think very carefully before applying for a license for accreditation. Apart from the requirements of accreditation, there would then be no limitations on providers.

If there were systematic flaws in the system, consideration could be given at a later stage to implementing more significant interventions in an effort to stem the in- or outflow of provider numbers, with the corresponding consequences of each for market efficiency.

2.8 Sanctions

Regulation is ineffective without appropriate sanctions for non-compliance and an effective customer complaint infrastructure.

Provider sanctions

It is submitted that the regulator should be granted the power to consider a range of possible sanctions, among them

- fines,
- public censure,
- removal of office-bearers, and
- closure of the organization with an order to transfer members as stipulated by the regulator.

A framework for sanctions should be established, but the regulator should retain a degree of freedom to exercise its discretion from case to case. An appropriate system of appeals must be put into place to protect providers and ensure that the legal framework is consistent with other parts of South Africa's law. Providers themselves need to be given sufficient confidence in the legal integrity of the system to consider participating in the first place.

It is also submitted that sanctions on the individuals running accredited providers are an important means of

[33] Article by Barbara Ottawa, writing for Investment and Pensions Europe, 27 April 2007, www.ipe.com.
[34] Author correspondence with Richard Hinz.

ensuring consistency of approach across all providers, particularly between the private-sector providers and their public-sector counterparts.

Closure of a provider is a last-resort action that should not be a common event because

- it reduces the number of providers participating in a market that risks becoming characterized by oligopolistic practices, and
- it is an impractical sanction against the public-sector provider, rending it ineffective in that case and providing an undesirable competitive advantage to the default fund.

Customer complaints

Attention also needs to be given to establishing an effective channel for participants to have their grievances heard and attended to. The office of the Pension Funds Adjudicator (PFA) would probably be the best institution to handle these complaints. The accredited entities are not the same as retirement funds – hence the proposed difference to the regulatory framework – but that office has a strong skill set and would appear to be a good place to start.

It is suggested that the authority responsible for handling customer complaints is given power, separately from the regulator, to raise finance through levies, to ensure the independence of this entity.

3. GOVERNANCE AS A MARKET MECHANISM

> Effective regulation of the governance structure of pension funds includes the establishment of a transparent framework for the division of responsibilities in the operation and oversight of the pension fund, and the accountability and suitability of all parties involved in the pension fund process. Governance regulations must also define the mechanisms for internal control, communication, and redress for pension plan members and beneficiaries. (OECD 2003: 13)

Governance is an elusive concept with many facets. It is fundamentally about how the rights and interests of members and beneficiaries are protected and balanced. Many think of governance as being established by a set of rules. In reality, the letter and the spirit of governance can be described as consisting of a number of components, for example

- a set of laws providing an overarching legal framework,[35]
- regulations specific to the industry, for example, the market for pension saving,
- a national or industry infrastructure,
- the organization-specific means for complying with the requirements of the law, and even,
- the extent to which organizations are seen to be complying with requirements and making an effort to stretch themselves beyond these standards.

This section of the report focuses on the final two points. Legal systems and regulations, it is argued, can only take an industry so far in implementing governance requirements, particularly those aspects of governance that are more difficult to define in law. [36]

> From an economic point of view, pension funds are a network of overlapping contractual arrangements that specify obligations on the part of all of these key players. If all behavior were the subject of verifiable contractual arrangements and there were no information problems, the governance structure would be largely a veil – any incentives available under one governance structure could be replicated by another by appropriate choice of contracts. We argue that incompleteness of contracts is a key feature of pension fund governance and will imply the need to match the governance structure to the incentives of the various parties and the nature of the pension contract being used. (Besley & Prat 2003: 6)

Since contracts are incomplete, governance effectiveness cannot rest solely on a set of rules. This section argues that the quality of governance must be a competitive differentiator for it to develop into an effective form of member protection. It considers how such an environment might be encouraged by designers of the system.

3.1 Governance in practice

> Pension funds should have appropriate control, communication, and incentive mechanisms that encourage good decision making, proper and timely execution, transparency, and regular review and assessment. (OECD 2005: 16)

The OECD principles of good governance from which this quotation is drawn (see Appendix 1) are set out in two broad sections called *Governance Structure and Governance Mechanisms.* The mechanisms suggest ways in which organizations should be looking to improve the implementation of governance principles. It follows that providers could seek to differentiate themselves from their competitors by demonstrating the extent to which they implement and build on these guidelines.

The OECD recommendations are set out in four sections:

- **internal controls** are concerned with the mechanisms in place to improve the operation of the organization and the attention given to the security of member interests,
- **reporting** is concerned with the flow of information between the parties involved in the administration of the retirement arrangement,
- **disclosure** covers the information that needs to be provided to stakeholders to the plan, in particular members and the supervisory authorities, and
- **redress** addresses the requirement that members of retirement arrangements with grievances have access to reliable and reputable channels for assessing these grievances and ordering compensation where appropriate.

[35] Besley and Prat (2003) refer briefly to the variety of legal frameworks in place to safeguard the system known in common-law countries as the trust system. They point out (page 6) that the pension fund "... can be a foundation with a foundation board (NL, CH), a mutual association with a board of directors (Germany), or a pension fund management company supervised by a control commission (Portugal and Spain)."

[36] A conflict of interest is a concept that can be difficult to define in practice. Organizations routinely disagree on whether a relationship might constitute a conflict, not least because the conflict itself has the potential to blind a player to the possibility that such a conflict could exist.

The supporting guidelines to the OECD principles of good governance provide excellent examples of methods for implementing the recommendations that should be considered in detail both by those responsible for regulating this environment and for firms considering application for the right to provide services to this industry. They provide practical advice on how the principles might be put into practice and have been reproduced in Appendix 1.

Their recommendations include:

- regular assessment of the performance of all parties involved in the operation and oversight of the pension fund,
- regular review of the compensation mechanisms of all parties involved in operation and oversight, with an assessment of the extent to which the incentives that they provide are correct, in addition to separate identification, monitoring and correction of conflicts of interest,
- regular review of operational infrastructure like software, accounting and reporting systems, and all information processes,
- the establishment of mechanisms to sanction the improper use of privileged information,
- the implementation of adequate risk measurement and risk management systems, with external audits,
- regular assessment of the system that supports regulatory compliance.

At the heart of many of these recommendations is a culture of self-scrutiny, an untiring determination to assess whether the actions of the trustees, administrators and all service providers are taken with the interests of members and beneficiaries at heart, and what changes should be made if they are not:

> Mechanisms are needed to assess regularly the performance of the pension entity's internal staff as well as the external service providers (e.g. those providing consultancy, actuarial analysis, asset management, and other services for the pension entity). It is also good practice for the governing body to undertake self-analysis and for an independent, external person/organisations to undertake a review of the internal controls of the pension entity. Where the governing body consists of an executive and a supervisory board the latter may be assigned with the task of assessing the performance of the executive board. (OECD 2005: 13)

The OECD recommendations provide merely a starting point. It is recommended that more detailed consideration of the regulatory framework for accredited providers should include a careful assessment of the impacts of the choices made by regulators around the world. Furthermore, we must learn from the regulatory experience of our counterparts in other financial services industries in South Africa: banking, collective investments and medical schemes, to name but a few.

Customer complaint channels

The regulatory framework must provide for a credible, independent, well-funded organization established to hear the complaints of participants and able to rule on these complaints in a binding manner. An Ombudsman covering the customers of accredited providers must be established and co-ordinated with similar existing offices.

Questions on whether such a channel should be separate from or integrated with the PFA, the entity responsible for hearing and ruling on the complaints of pension fund members, are dependent on the broad nature of member supervision. Such discussion belongs properly with the corresponding issues around the regulation of accredited providers (see section 2.8).

Complaints can usually only be ruled on by the Ombudsman after the fact – that is, when financial loss has already been incurred. What is important in the context of governance is that providers are encouraged to make every effort to resolve customer grievances before customers take actions that may damage their accumulated savings. Consideration should be given to establishing a framework to encourage competitive behaviour around customer servicing. Thoughts on measurement of customer service are set out in section 4.8.

Professional oversight

The need for professional oversight is noted in section 0 as an important element of the monitoring of prudential management standards by the regulator. The existence of professional oversight standards and rules requiring mandatory sign-off by professionals with the necessary experience considerably enhances the effectiveness with which the regulator can meet its responsibility to ensure that providers are meeting prudential standards.

The existence of professional standards also assists providers to demonstrate to the saving public that they are making every effort to ensure that their operation is safe and properly run, and the use of such professionals, where appropriate, is endorsed. This does not do away with the need for due care in the process of selecting and remunerating these professionals.

3.2 Reporting principles

As the OECD points out, reporting to a number of external entities is an important part of the responsibilities of all providers.

Reporting to members

Standards of reporting to members must be established at the outset to ensure that consumers overall have confidence in the system and in the accredited providers that they select to manage their accumulated saving. This is the rules-based part of governance. To this should be added encouragement or explicit incentives to providers to go much further than this.

Disclosure is one of those subjects that feels as if it should be easier to implement. Obtaining the agreement of all parties that it should be done is a start, but designing and putting into place a code that adequately meets the needs of a very wide variety of consumers can be extremely difficult in practice.

The purpose of this section is to highlight disclosure as an important element of the governance framework. Details of the approaches that might be taken to developing appropriate minimum disclosure standards are set out in section 4.7 and principles of minimum standards of customer service in section 4.8.

Reporting to the central collection agency

Providers play a crucial part in maintaining the integrity of the complex web of data that forms the old age savings system. Since contributions are collected by a central agency and, based on the elections of participants, passed on to providers, the providers themselves have a responsibility to demonstrate to the collection agency that they are managing the assets of the individuals whose contributions have been directed to them. Information sharing and reconciliation will form an important part of the relationship between provider and collection agency. Minimum standards of the frequency and quality of information sent by providers must be established as part of the overall system architecture.

This is of particular importance should the decision be taken that the responsibility for benefit payment is to be centralized, because data and assets must be transferred from the providers back to the payment agency.

Disclosure to the wider public

The marketing efforts of providers should include at least some element of education that is in the public interest, rather than being geared primarily to making their products the most attractive to the detriment of competitors.[37] As such educational efforts may take place only to a limited extent, it may be necessary for the regulator to impose standards on general provider disclosure, perhaps requiring providers to contribute to the costs of maintaining a central information repository to display industry and product information like comparative charges and investment performance.

Setting standards and policing compliance

Who should be responsible for setting disclosure standards? In Australia, the pension industry supervisor, the Australian Prudential Regulation Authority, does not take on the role of setting disclosure standards. This is the responsibility of the Australian Securities and Investments Commission, which sets standards for all forms of company disclosure.[38]

This approach would seem to be the exception rather than the rule. In most countries the entity responsible for pension regulation also takes on the task of establishing disclosure rules and policing the compliance of providers to these rules. It is recommended that a similar approach be taken in the South African accreditation environment.

4. PRODUCT REQUIREMENTS

In an environment as important as this one, to the providers of products and to all citizens of the country, controls form a crucial part of system design. This section of the paper starts by justifying the need for minimum products standards and then covers the subject under a number of headings:

- contribution and switching flexibility,
- form of benefit,
- administrative charges,
- commission models,
- group arrangements,
- disclosure principles, and
- standards of service to participants.

A number of these issues overlap with one another and with the discussion in other parts of this document and cross-references are noted wherever relevant. Each of them is addressed as concisely as possible, but supported by the additional information set out in the appendices:

- contribution collection (Appendix 2)
- survivor benefits (Appendix 4), and
- annuities (Appendix 5)

4.1 Minimum product standards

Product standards for financial services offerings are rare in South Africa, and non-existent in pension arrangements. The FSB does not enforce product standards and has no regulatory power to do so. Emphasis on financial soundness has led insurers to err in favour of shareholder rather than customer, one of the strong underlying causes of difficulty in the market for individual retirement products:

> Underwriters of retirement annuity funds appear in the main to be complying with the Long-term Insurance Act in calculating early termination values, but are exercising such discretion as they have in favour of the shareholder. The legislative framework governing insurers has historically focussed on financial soundness concerns, rather than provision for more explicit consumer protection measures in the form of market conduct or product regulation. (National Treasury 2006: 13)

This is one of the strongest motivations for the introduction of minimum product standards in the opt-out environment, but other reasons for introducing such standards can be added:

- In a mandatory environment, **customer protection** is of paramount importance because these participants do not have the option of diverting their savings to providers outside of the industry.
- Providers that survive the first few years of the system are likely to become **enormously powerful**, with high concentration of assets in the hands of a few. Though free-

[37] Refer to the discussion in section 4.4, administrative charges, and Appendix 2, contribution collection, for more on the issue, covered particularly well by James et al. (2001).
[38] Refer, for example, to discussion and information documents written by the Australian Securities and Investments Commission (ASIC 2004a & 2004b), available through the ASIC web site.

market dynamics may go some way to ensuring that they act in the interests of their customers – and it is the operation of these dynamics that forms a significant part of this paper – they may alone not be sufficient to give participants the confidence that they are paying their contributions into a safe industry.

- **Cost-efficiency** is a very important objective of the system. A set of product standards should help to keep down the cost of product provision and the cost of supervising these products.
- **Consumer comprehension**, and hence confidence, would be enhanced by a set of rules that makes products reasonably easy to understand and to compare with alternatives. Complexity discourages participation and reduces the satisfaction of participants[39] while simplicity enhances the willingness to participate.[40]
- **Portability of products**, an important aspect of an industry that should be as competitive as possible, is enhanced by similarity of design and ease of comparison.

The main difficulties with a product-constrained regulatory structure are:

- the limitations that this approach places on innovation of product design, and
- the potential for higher regulatory and compliance costs.

On the claim of innovation limitation, there is substantial evidence that product innovation in this country has not been driven primarily by customer need but by the objectives of providers to:

- differentiate offerings from the corresponding products of competitors, and
- maintain or enhance, perhaps only implicitly, the information inequity between themselves and their customers that tends to support their position as product provider.[41]

The respective papers of Iyengar et al. (2003) and Beshears et al. (2006) respectively demonstrate the damaging impacts of complexity and the benefits of simplicity.

The financial services industry frequently cites the issue of regulatory cost as damaging the overall value for money provided to customers, but evidence either way is thin. Just as it is difficult for the regulator to demonstrate that any new regulation brings with it a benefit of greater value than the additional cost passed on to customers, the financial services industry finds it a challenge to show the opposite. Section 2.3 provides figures showing that the cost of regulating a mature individual account system need not be high.

Product standards provide participant security and facilitate product comparability. They are not just about minimums, like imposing a floor on the frequency and clarity of communication requirements; they are also about maximums, like setting a ceiling on the number of investment funds made available to participants.

4.2 Contribution & switching flexibility

The flexibility to allocate contributions across providers and to switch accumulated assets between these providers is, at first glance, a desirable trait of a mandatory defined contribution system, because it entrenches freedom of choice to participants.

Unfortunately, it may also produce unanticipated consequences, increased overall system cost, for example. Policymakers in some Latin American countries have successfully reduced system costs by constraining the frequency with which participants may switch between providers. This constraint reduced the emphasis that providers had laid on winning participants at all costs, resulting in cuts to intermediary channels and a significant reduction in overall costs.

This section summarizes a set of recommendations on the issue, supported by a longer discussion in Appendix 2. The complex set of considerations may be summarized into four key questions:

- Should the contributions be collected separately by accredited providers or together in a central hub?
- If contributions are to be collected centrally, when transferring the contributions to private-sector providers, should the information on the members also be furnished to these providers, the alternative being that the providers merely manage the assets without the possibility of interacting with participants, the so-called 'blind account' approach?
- Should splitting of contributions between providers be permitted or should they always be allocated only to one accredited entity?
- Should participants be free to switch contributions or accumulated assets between providers and, if so, how frequently should such switching be permitted?

Contribution collection

While this discussion is about the degree of centralization that is appropriate for collecting contributions, the issue is only partly about financial flow. Information also needs to be recorded appropriately. Since contributions to the system – social security or individual account systems – are mandatory, centralization of information is an essential element of the system, at the very least to monitor compliance. Whether or not finances follow the same route, serious investment in information systems in some public-sector agency is a requirement.[42]

If a contributory social security pillar is implemented, then it is difficult to imagine a situation in which, at least for this part of the old age system, the private sector would be better able to collect contributions than the public.

Policymakers assume that similar arguments can be used to justify the centralization of contributions in an individual-account pillar as well. This is not necessarily the case, as many countries have decided. Demarco and Rofman (1999; refer to the more

[39] The research of Iyengar et al. (2003) confirms this position, a point that Turner acknowledges in his review of the United Kingdom environment.
[40] BesheArs et al. (2006) demonstrate this empirically.
[41] This is often complemented by a corresponding information inequity between the primary distribution channel of the provider – the intermediary network – and the customer.
[42] The tax-collection agency is a candidate; so is the social-security agency; but an independent entity focused purely on information management should not be ruled out either.

detailed information in Appendix 2) suggest that the following factors should form part of the consideration around the locus of contribution collection:

- economies of scale,
- efficiency of existing collection agencies,
- timing and speed of transfers,
- the need for control mechanisms,
- the potential for co-operation across collection entities,
- efficiency incentives,
- enforcement power,
- cost,
- sources of financing the collecting operation, and
- the potential for corruption.

The view of the author at this early stage is that the centralized collection systems recently implemented in a number of countries – Sweden and Latvia are examples – and under serious consideration in others, like India, is the strongest available model:

- to manage system finances cost-effectively,
- to co-ordinate the twin goals of tracking information and finances, and
- to reduce to an acceptable level the costs and market distortions that can arise under the alternative private-sector collection approach.

This is an initial view that must be rigorously tested against the criteria listed above. Both private companies and their public-sector counterparts have an important role to play in showing the best way to establish a safe, cost-effective premium-collection mechanism.

Private-sector involvement: wholesale or retail

On what basis should accredited entities be managing the pension savings of participants? In some countries, contributions are redirected to the providers chosen by the savers, but information on the participants is withheld from the accredited entities, turning them into providers of wholesale asset management only.

This has the advantage of reducing marketing costs, limited under this scenario to broad advertising of investment capabilities and track record, though hopefully also to competitively differentiable approaches to governance. James et al. (2001) show that the potential saving can be considerable, arguing that marketing efforts are seldom focused on the consumer-education aspects that would characterize such activity as a social good.[43]

It is submitted that accredited providers should be held responsible for administering the accounts in their entirety, managing the client servicing and the payment of benefits. For this reason, the view is taken that, whether contributions are collected centrally or by the accredited entities, they must be given access to individual information so that they can meet these servicing commitments.

The potential for undesirable consequences must then be managed in other ways – for example, through cost controls, high standards of disclosure and both a rules-based and market-based approach to high standards of governance.

Contribution splitting and switches between providers

Most of the individual-account systems established in Latin America over the last two decades laid a strong emphasis on simplicity of administration in order to improve the level of understanding of the system by participants and to keep costs down. In most instances, capital markets were poorly formed and participants were further protected by the requirement on providers that they meet certain investment-return guarantees.

With this in mind, the paternalistic and restrictive requirement that participants allocate all of their contributions **and** their accumulated funds to only one provider is not as bad as it may otherwise seem to observers in countries with mature capital markets and sound regulatory systems. There was little practical difference between providers, so the emphasis on this restrictive choice did not subject participant interests to high risk of inappropriate choice of investments or provider. It also constrained costs by preventing the fragmentation of the accumulated savings of participants.

Policymakers, particularly in Chile, have more recently been inclined, with improvements to the depth of capital markets, the understanding of participants, and the experience of providers, to lift some of the investment limitations and the restrictions on member choice that have existed up until now. However, they are also very concerned about the potentially negative consequences for system cost of unfettered switches between providers.[44] The consensus view appears to be that limitations on switching are acceptable[45] and that gradual liberalization on product and investment restrictions is a sound way to promote wider choice to participants. The view that participants should be required to commit all of their savings to one provider appears to have prevailed despite the disadvantages of such an approach, notably concentration of risk.

A final question concerns the responsibility for choice of provider. Until recently, the choice of provider was exercised in Australia by the employer. This has recently changed and individuals are now permitted to elect the provider to manage their savings. In an opt-out environment, it would seem appropriate for individuals to be given the responsibility and freedom to exercise their right to redirect contributions from the default public-sector provider to an accredited private-sector alternative.

The author is inclined to support the combination of views:

- that individuals must allocate contributions and accumulated assets to a single provider; and

[46] A fixed switching date for all participants is strongly recommended against. The 'mating season' approach may provoke inappropriate marketing and behaviour by providers as they put all of their effort into attracting participants from competitors.

[44] In an environment of unfettered switching, providers develop an all-or-nothing approach to winning customers from one another and invest heavily in distribution channels, pushing up industry costs in the process. In a mature system, switching is a zero-sum game, but the spending on distribution pushes down net overall benefits to participants.

[45] A discussion document by a consumer-watch organization concerning the Peruvian system suggests that permitting more frequent transfers between providers would encourage them to compete more aggressively on investment performance (Instituto de Defensa de Consumidor 2002). This view appears to be in the minority.

- that they may switch between providers at any time, but a period of at least one year must have elapsed since their most recent switch.[46]

However, it is strongly submitted that some choice of investments should be permitted so that individuals are able to select from a range of providers, safe in the knowledge that each makes available a product with allocation to investment classes suitable to the particular needs of the participant. It is recommended that each provider be required to make available a limited range of investment options, each with specified characteristics and asset allocation limitations. This is motivated in section 5.4.

4.3 Form of benefit

Are accredited providers to be responsible for administering both retirement and survivor benefits? Do they pay out benefits in cash or can they provide annuity products as well? These are just two of the difficult decisions that fall under the heading of form of benefit.

It is not appropriate to attempt, in this broad paper, a detailed discussion of the issues that impact on the range of benefits that may be offered by accredited providers. The issues are fraught with complexity, some of which is set out briefly in Appendix 4, which discusses survivor benefits, and Appendix 5, covering the subject of annuities. This section provides a brief synopsis of the main issues and some thoughts on the way forward.

Survivor benefits

With a few country exceptions, firms offering mandatory individual accounts are required to provide risk protection as well, most often in the form of both death and disability cover. This is sometimes supported by the existence of further benefits payable from the PAYG first pillar.

The current system in South Africa exhibits considerable variation in the levels and cost of cover enjoyed by citizens and this cover is in any case available only to the formally employed.[47] There exists a strong rationale for some form of minimum risk cover, through one or both of the first and second pillars.

Since the key competency of an insurer is intermediating risk, South African insurers have a strong claim to providing products that cover these types of risk, but this is not the only available channel for the provision of death and disability benefits.

Some of the advantages of such an approach, discussed in more detail in Appendix 4, are

- the experience of the insurers at pricing and risk management,
- the administrative simplicity of permitting the same entity to provide both saving and risk products, and
- the consistency with the recommendation that providers be held accountable for servicing system participants.

There are also a number of disadvantages to this approach. Effort to overcome these would be worthwhile if the benefits of competitive product provision, within certain constraints of standardization, are to be attained. These disadvantages are

- the potential for conflicts of interest or corrupt relationships, if accredited providers are permitted to outsource their book of risk benefits, bearing in mind the scale of the business opportunities contemplated,
- if providers must offer both saving and risk cover, the systematic disadvantages to firms not currently providing risk benefits, yet possessing outstanding skills in administration and asset management,
- the potential for lower standards of transparency due to the fact that two products are being wrapped into one, and
- the possibility of unfair advantage for the public-sector provider with its very different approach to the quantification of risk and treatment of it in its pricing strategy.[48]

The discussion in Appendix 4 motivates for the provision of death and disability benefits from both a PAYG pillar and its individual-account counterpart. It suggests that, with sound approaches to mitigating the risks involved, it is feasible to permit the opting out of death and disability benefit to private-sector entities, perhaps after a certain minimum level of cover has been provided through centralized approaches to protect the most vulnerable in the system.

Annuities

Providing annuity products is very different to providing the facility to save for retirement. The supplier takes on considerable financial risk over a very long period of time that requires a sophisticated set of skills to measure and manage. Annuity pricing is keen and the possibility of financial loss not insignificant. Appendix 5 provides a full discussion of the issues around form of benefit on retirement.

- That discussion puts forward the case
- that firms licensed to provide administration and asset management of mandatory savings should not automatically be permitted or required to sell annuity products,
- that the accreditation of annuity providers should continue to fall under the licensing requirements of the Registrar of Long-term Insurance,
- that those firms accredited to provide administration and asset management services – perhaps also risk benefits – that are also providers of annuity products should not be permitted to obtain a systematic market advantage over their counterparts who do not provide annuity products,
- that retirees should therefore be able to exercise their right to purchase an annuity, on retirement, from any provider, and in fact should be strongly encouraged to exercise this so-called ‘open market option’, perhaps even demonstrating, should they stay with the same provider, that they have applied their

[46] A fixed switching date for all participants is strongly recommended against. The ‘mating season’ approach may provoke inappropriate marketing and behaviour by providers as they put all of their effort into attracting participants from competitors.

[47] This is supported by a broad-based state system of disability grants and some cause-specific death benefits, for example from the Road Accident Fund and Workmen’s Compensation Funds. However, there is currently no coordination of benefits across state agencies and little effort to seek complementation of private-sector provision with state benefits.

[48] A not-for-profit entity is likely to take a less conservative approach to the profit margins required to compensate it for taking a risk than would the shareholders of a profit-seeking entity, who, if not rewarded for additional risk, would have a rational preference to invest elsewhere.

minds to the possibility of moving to alternative annuity providers,

- and that some requirements be placed on the range of products that annuity providers must make available in order to ensure that some product standardization is available and that each standard product is available across a sufficiently broad range of providers to encourage reasonable levels of competition.

It also motivates the possibility of a public-sector provider aimed at low-income annuitants to address the systematic price disadvantage to which market-led practice exposes this group. Clear delineation of customers would address concerns of unfair competition between this entity and its private-sector counterparts.

These issues are not straightforward and it is recommended that they be given deeper consideration over time.

4.4 Administrative charges

In principle, competition among plan administrators should make regulation of fees and commission unnecessary. In practice, agency and information problems can lead to distortions in the structure of fees and commissions. Because mandatory saving schemes are by definition compulsory and economies of scale in the pension industry may result in concentration, investment companies may end up charging more than they would in a purely voluntary competitive system. (World Bank 1994: 223)

This section describes the financial significance of charges to the system participant. It points out that charges are of concern to policymakers around the world, despite being lower in many instances than in South Africa. It discusses the policy options available to keep charges down while managing the risk of market distortion. It asks the key question of whether there should be a cap on charges in the accredited environment and sets out some recommendations.

The term charges is used in this section to describe all forms of fees levied against the accumulated fund of the saver. Fees may be charged at the time of the contribution, on a regular basis during the term of the saving (in fixed Rand terms or as a percentage of the assets under management) or at the time of withdrawal from the system.[49]

The significance of charges and the complexity of the policy decisions

Charges matter in a defined contribution because:

- they are levied against the individuals saving in the system, and
- they are usually of permanent effect, today's charge directly impacting the accumulated level of saving, hence the prosperity of the saver in retirement.

Charges are significant. Rusconi (2004) shows that, over a lifetime of saving and on a reasonable set of financial assumptions, an increase to annual asset-based charges of 1% produces a decrease in accumulated savings at retirement of 19%.[50] This represents permanent damage to the income of the retiree, reducing it by nearly one Rand in five.[51]

Any systemic reduction in the fees paid by system participants makes a difference to their well-being in retirement. This must be an objective of the policymaker, a core principle underlying the design of the system. Scale is one way to reduce charges, but it brings with it a different set of problems, the potential for monopolistic practices that could themselves have the impact of putting upward pressure on prices.

> The presence of economies of scale [in the Chilean pension system] has facilitated saving on costs over time. The increase in the number of people contributing in the Administrators has made it possible to make use of economies of scale, and this came about in two ways: on the one hand by the obligatory incorporation of new contributors entering the System, and on the other by the reduction in the number of Administrators, which has produced greater concentration in the industry. The savings on costs mentioned above have been passed on in part to the members, and in part have gone towards increasing the income of the Administrators so that they have obtained greater capital returns. (SPFA 2003: 211)

The policy trade-offs form the core of the discussion in this section, which draws on material from a number of countries in order to put forward a coherent set of recommendations.

Evidence of high charges in South Africa

Rusconi's analysis raises very serious concerns about the efficiency of the system currently in place in this country, hinting at the possibility of widespread market failure due to the apparent absence of price sensitivity on the part of participants.

Using methodology consistent with that of international counterparts, he shows that some parts of the retirement saving industry appear to be very expensive, both against local alternatives and against international benchmarks. Under the best-case scenario of a disciplined, uninterrupted lifetime of saving, he calculates that insurer-provided retirement annuities consume between 27% and 43% of the before-charges accumulation of savers. He computes similar statistics, which he refers to as charge ratios, of 22% to 33% for unit trust-based retirement annuities and between 17% and 27% for occupational retirement funds, expressing concerns that the experience of smaller funds may exceed these bounds.

These figures are conservatively calculated, assuming an almost unrealistic discipline on the part of the saver to put away a gradually growing contribution over an uninterrupted working span. Any deviation from this would push up the costs, as has been so clearly demonstrated by the controversy around poor early termination values.

By way of comparison, he quotes the personal pension system in the United Kingdom, the equivalent of South Africa's

[49] More detailed discussions of the types of fees charged by providers are available from a number of sources. In South Africa, Rusconi (2004) describes the analysis of total charges for a variety of South African retirement savings vehicles and Rusconi (forthcoming) sets out in detail the range of fees levied by providers of endowment savings products. Internationally, Whitehouse (2000) provides an outstanding discussion of the international framework and the Steventon and Sanchez (2007) consider the charging options in the context of the current United Kingdom reform.

[50] Rusconi assumes that contributions increase at a rate of 7% annually, roughly in line with salary growth, and that assets return 10% a year. The result is little impacted by changes to these assumptions.

[51] A variation in charges of 1% a year is not inconceivable. Rusconi shows, for example, that the average difference between investing in an active equity portfolio and its passive equivalent is 0.86% annually (Rusconi 2004:103), food for thought since there is no evidence that active investment over a lifetime outperforms passive. He points out that the difference between saving in an insurer-provided retirement annuity and a unit trust equivalent is, at the high end of the asset fees, 1.5% (pages 127 & 128). He shows that investing in individual retirement annuities could cost over 3% of assets annually, while those fortunate enough to be members of a large occupational fund may pay total fees of as little as 0.8% of assets (pages 86 & 127).

retirement annuity industry, as producing an average charge ratio of between 23% and 25% (Murthi et al. 1999; Whitehouse 2000b; Devesa-Carpio et al. 2003). He quotes analysis of the equivalent ratios in the largely immature private-sector-managed individual account systems of Latin America that run at charge ratios of between 13% and 26% (Whitehouse 2000b; Devesa-Carpio et al. 2003) except in Bolivia where a structural duopoly runs at lower fees. With one or two exceptions, the Eastern European systems appear to be running at similar levels of efficiency, with Poland at between 17% and 21% (Chlon et al. 1999), the Czech Republic at between 14% and 18% (Lasagabaster et al. 2002) and the young Hungarian system at between 17% and 28% (Rocha & Vittas 2001).

What are the causes of high costs in South Africa?

> In general, concerns with respect to excessive costs point to a market in which competition is less effective than it could be. Competition is deemed effective if there is a significant number of product providers or there is a credible threat of new entrants; consumers are empowered to make rational choices and can exercise these choices at low cost. (National Treasury 2004: 13)

National Treasury goes on to suggest that the primary causes of these costs, manifesting in an environment of generally weak competition, may be:

- low levels of competition and transferability between products,
- poor disclosure,
- low levels of consumer understanding,
- highly complex product design, and
- weak governance arrangements combined with significant vertical product integration.

National Treasury adds to this the concern that regulated commission levels become the norm rather than a ceiling below which competition takes place to reduce prices.

Concerns within the life insurance sector are being dealt with through a variety of mechanisms, from reviewing the commission ceilings and setting minimum values for early termination values, to re-writing parts of the pension fund legislation. These are outside of the scope of this paper. The reason for raising the issue of poor competition in the context of a discussion on charges is to emphasize the need for lessons learned to be applied to the design of the system of accredited providers to the mandatory pension saving sector.

The right of the policymaker to intervene

> Competition between the fund management companies [in Latin America] was meant to provide the highest quality of services at the lowest prices for workers. Instead, the mechanism has produced cut-throat competition among companies for the individual accounts and high prices for all workers. The largest component of the operational costs are [sic] the expenses for marketing and advertisement. (Queisser 1998: 74)

What is clear from the description in the previous section is that the operation of the free market has been flawed. With the scale available to South African providers – total assets underlying pension savings are now valued at well over R1,000 billion – charges such as those experienced in parts of the retirement saving industry signal a systemic problem. This alone is sufficient reason for the policymaker to intervene and justifies the types of intervention contemplated by South Africa's policymakers and discussed in this paper.

A second and much stronger foundation for intervention exists in the event that retirement saving becomes mandatory. It then becomes essential that the policymaker does everything possible to ensure that the environment into which South Africans are forced to deposit savings is as efficient as possible and operates as a free market should.

This implies, at a minimum, that the framework is sound, as discussed in other parts of the paper, that governance structures are fair and supervision effective. It also implies that participants are assisted as far as possible to make decisions that are in their financial interest, not in those of the providers selling the products or the intermediaries facilitating the transaction. This requires high levels of disclosure and simple, easy-to-compare product structures. Price-increasing market distortions must be addressed so that participants are not paying unnecessarily high charges. And consideration must be given to the need for a price cap as a final level of protection because other protection measures may fail to work to the benefit of consumers. This is a system of accreditation and price needs to form part of such a system.[52]

A third reason for intervention is that it can reduce aggregate system costs in a way that the free market alone may not achieve.

> Competition … only precludes excess rents; it does not ensure low costs. Instead, the structure of the accounts determines how high the costs are. Furthermore, centralized approaches – under which choices are constrained and economies of scale are captured – appear to have substantially lower costs than decentralized approaches. Low administrative costs thus may be possible under an idealized set of accounts – one that involves a centralized approach – but not under a decentralized approach. (Orszag & Stiglitz 1999)

This appears to have been borne out by the experience of a large and supposedly extremely competitive environment in South Africa.

The Turner report (UK Pension Commission 2005) alludes to this point as well. It acknowledges that, without structural changes, there is a part of the market that it is impossible to service at less than a certain fee, say 1% or 1.5% of assets annually, and that those who find themselves in this part of the market therefore

[52] This view is supported by evidence from Chile that profit margins are unacceptably high, signalling a failure of competitive mechanisms to push price down to appropriate levels (SPFA 2003; Niemietz, forthcoming; a)

have rational disincentives to save. Only through structural reform of the market is it possible to create the environment for a much larger set of potential customers to participate at a price that is rationally acceptable to them.

International experience

> The amount of fees or charges levied on financial retirement products is an area of considerable debate and research. For critics of a funded pillar, these fees are much too high, in particular compared with the (best) unfunded and public benchmark; they reduce the net rate of return to sometimes unacceptably low levels and thus eliminate the potential return advantage of a funded pillar; and the structure of fees is often nontransparent and antipoor, which prevents a broader pension coverage of lower-income groups. Also, supporters of a funded pillar (including the Bank) recognize the need to bring fee levels down and to rework fee structures. But they see the problem as much more manageable, with fee levels in client countries much more in line with those of popular financial services in developed countries and falling after start-up costs have been covered. (World Bank 2005: 158)

There is no doubt that, around the world, the levels of charges in mandatory individual account systems have been cause for concern. A comprehensive recent study looking back at the successes and failures of all of the new Latin American systems (Gill et al. 2003) raises system cost as an area of particular concern. This view was expressed some time earlier by Monika Queisser, writing a summary of the second wave of reforms to the Latin American environment, stating that "… the individual account management by specialised fund management firms has proven to be very costly…" (Queisser 1998: 15).[53]

Countries take different approaches to regulating the fee structure of pension providers. Some countries take the view that there should be no control exercised over fees. Australia, Hong Kong, the United Kingdom and the United States have very few, if any, explicit limitations on charges, relying mainly on the broader standards of prudence established by the trust-based system (World Bank 2005: 158).

- Parts of the **Australian** system are notable for their unexpectedly high costs. This suggests that disclosure cannot be regarded as a panacea for the problems of high fees. Australia has one of the toughest disclosure regimes in the world. Refer to the case study on the Australian system in Appendix 6.
- Researchers in the **United Kingdom** have expressed their concern at the high levels of charges experienced in that country (Murthi et al. 1999). The UK policymaker has certainly demonstrated a willingness to implement fee caps where necessary, as demonstrated by the 1% of assets cap on the stakeholder pension system.[54] Included in the recommendations of the recent Turner Commission is a proposal that fees in the mooted auto-enrol system are limited to an annual 0.3% of assets (UK Pension Commission, 2005).
- **Hong Kong** has confirmed that it does not regulate fees, but it is currently carrying out a study of the charges of providers in the industry (direct correspondence with the regulator).
- In the **United States** private pensions are voluntary, reducing the rationale for imposing any limitations on charges.

Many countries **limit the structure** of charges, but **not the level**. Many of the Latin American reformers fall into this category.

- **Argentina** permits flat and variable fees on contributions and a separate entry fee, but no exit or asset management fees.
- In **Peru**, variable fees calculated either as a percentage of collections or as a percentage of assets are permitted, but both fixed and variable fees on benefit payments are allowed. Unusually, exit fees are also permitted in Peru, discouraging excessive transfers between managers.
- **Colombian** providers are not restricted in the fees that they charge, but must limit the total of fees and the contributions for survivor benefits to 3.5% of wages.

There are some exceptions to the broad approach of these reforming countries. **Chile** permits all fee types, but requires that fees are the same for all members of the same type[55] and for all funds offered by a pension fund manager. In practice, only contribution-based fees are utilized (SPFA, 2003). **Mexico** permits fund managers to choose both the type and the level of commission, but all fee proposals must be approved by the regulator (CONSAR, 2007).

The most recent proposal for introducing mandatory individual accounts in **India** (IIEF, 2004) recommends that providers be allowed to charge an asset-based fee and that the supervisory authority specify entry and/or exit fees that apply to all providers to cover brokerage fees and custodial charges.

Table 3.
Summary of international charge management strategies

No restrictions	Australia Hong Kong UK (personal pensions) US (401k)
Cross-subsidies to low-paid workers	Mexico
Limits on charge structure	Argentina Chile Hungary
Partial ceiling on charges	Poland
Variable ceiling on charges	Sweden
Competitive bidding, multiple portfolios	US (thrift savings plan)
Fixed ceiling on charges	El Salvador Kazakhstan UK (stakeholder pensions)
Competitive bidding, single portfolio	Bolivia

Sources: Whitehouse (2000a, 2000b, 2000c & 2001)

[53] At the risk of repetition, note that these issues have been raised concerning systems that appear, according to Rusconi (2004), to be considerably more efficient than the existing South African alternative.
[54] This was more recently revised to 1.5% of assets in the first 10 years of a policy, which has a very small impact on the overall charge ratios of long-term savings.
[55] The distinction is made between employed members, participating on a mandatory basis, and the self-employed, who participate on a voluntary basis.

A few countries limit a part or all of the charge that providers may levy, but these are in a minority (World Bank, 2005). **Poland** is an example of such a country. It limits asset-based fees to 0.05% monthly and permits pension funds only to levy fees, apart from this, on contributions and on transfers out within two years of joining the fund (Polish SPF, 2000).[56]

Table 3 summarizes the approaches used to manage system costs across a number of countries.

Options for intervention

> … experience so far suggests three promising approaches [to enhancing system efficiency]. First, limit costs by saving on the administrative costs of contribution collection, account administration, and so forth (that is, adopt the clearinghouse approach). Second, limit the incentives for marketing expenditures by pension funds through blind accounts or constraints on the ability of individuals to change funds as a result of laws or exit fees. Last, but not least, limit asset management fees by restricting the choice of individuals, including the use of passive investment options, employers' choice of financial provider, or competitive bidding for a restricted number of service suppliers. (World Bank 2005: 162)

A number of writers have considered the options for intervention to reduce costs. Some of these involve direct intervention in the pricing process. Most are actions expected in consequence to produce downward pressure on the charges imposed on participants. All of these are considered as part of the larger set of recommendations covered by this document.

1. Establish centralized contribution collection

The World Bank (2005) proposes this as a promising way to reduce costs. Sweden and Latvia, among others, have introduced a clearing-house system.[57] India has proposals, in advanced stages of development, to do so. Variations are possible, but the central element of a clearing house system is that all contributions are directed through one pay point and that flows are directed to providers in an efficient, aggregated manner.

Cost savings result from the simplification of the payment process for employers, the economies of scale and, in countries that choose to implement this approach, the absence of contact between individuals and pension fund providers, reducing the potential for marketing costs.

2. Limit marketing incentives

One of the advantages of the clearing house is that it can be structured in such a way as to cut the link between the participant and the provider, removing the potential for direct marketing. The so-called 'blind accounts' method, discussed in more detail in Appendix 2, is without a doubt an effective way of reducing costs. It could remove the need for accreditation standards completely, since private-sector entities would provide asset management only, fees would be negotiated by the clearing house and asset managers already have a system of licensing.

Similar objectives, easier to implement but less effective, can be achieved in the absence of the clearing house – for example, through limiting the freedom of individuals to change funds, either through laws or through exit fees.[58]

Chile reduced the number of fraudulent transfers by tightening the administrative requirements for these transfers, requiring the provision of certain information to providers on application for transfer. This had the effect of dramatically reducing the number of agents in the industry, the proportion of total provider cost attributable to agent salaries and marketing budgets, the number of transfers in the industry and the total marketing cost per participant (Uthoff, 2001; SAFP, 2003).[59]

3. Implicitly limit asset-management fees

These charges could be managed in a variety of ways – for example, by requiring that the employer select the provider, or by limiting the range of funds available to individuals, perhaps motivating the use of passively managed funds.[60]

4. Increase disclosure

As market failure is often built upon the information inequity between provider and customer, and the inability or unwillingness of the customer to select product on the basis of appropriate criteria, like price, the policymaker should consider carefully the options for improving disclosure to increase the likelihood of appropriate product selection. In some countries, the regulator takes a strong role in providing disclosure that makes provider comparison easier[61] Such an approach for the South African market for accredited providers is strongly encouraged.

5. Standardize offerings

Product comparison is easier if the products themselves are straightforward. South Africa's insurance industry appears to be characterized by very high levels of complexity, entrenching the information advantage of providers and perpetuating the dependence of customers on these providers and the intermediaries that facilitate the product sale. Simplified, standardized products would facilitate product comparison and improve the operation of the market.

Limiting fee types is one way of standardizing offerings and should receive strong consideration – see the discussion of this option below.

[56] Costs covered by the fund directly from the assets, for example, on the acquisition or disposal of assets, may also be charged, but these are implicit charges reducing fund performance.

[57] Palmer (2000) and Sundén (2004) provide descriptions of the Swedish clearing-house system.

[58] This is controversial and is outlawed in a number of countries because it creates a disincentive to switch providers that may not be in the best interests of the participant. An alternative approach is to permit loyalty bonuses that encourage long-term commitment to a provider rather than discouraging exit, but this probably serves to add to the complexity of the decision, making it more difficult for individuals to assess the trade-offs in their decision-making. Peru permits an exit fee, but sets it at a level that is uniform across the industry (Queisser 1998: 75), establishing perhaps the best balance of the trade-offs involved: participants should be free to move between providers but excessive movement increases costs, mainly through pushing up marketing activity, and should be discouraged.

[59] Some suggest that more, not less, movement between providers should be permitted in order to encourage participants to move to providers producing the best returns, for example the Peruvian consumer interest group, Instituto de Defensa de Consumidor (2003). This argument is a little one-sided, emphasizing the potential benefits of frequent movement and ignoring the downsides. There is, in any case, little evidence that investment returns are repeatable, potentially rendering frequent movement of little benefit and significant waste.

6. Introduce competitive bidding of service suppliers

Auctions have been used in a variety of circumstances to control costs, from the fledgling individual account system in Bolivia (Von Gersdorff 1997) to the huge saving program for public servants in the United States, the $65 billion Thrift Savings Plan (James et al. 2001). Consideration should be given to this approach to reducing costs, noting that suitable controls on all parts of the system are crucial. Further discussion on the subject is provided in Appendix 3.

7. Allow more than one account per worker

The intention behind this recommendation is that the units over which providers are competing will become smaller, because workers can spread their savings across a number of providers, reducing the incentives on providers to compete for large accounts. This appears to be a logical approach, addressing systemic provider risk as well as the marketing risk.

However, allowing more than one account will not prevent providers from trying to attract all of the accumulated assets of participants. It would also introduce the possibility that participants will opt out of making any choice, spreading their savings across a large number of providers and increasing the unit costs in the process. This issue requires careful consideration of the trade-offs of the alternatives.

8. Allow multiple types of providers of pension fund management services

Insurers have traditionally dominated the South African retirement saving environment, particularly for individuals and small employers. This approach is attractive from a competition point of view, but proliferation of providers potentially increases regulatory costs, reduces the potential for economies of scale, increases the volume or complexity of information faced by participants and reduces the confidence with which participants make their decisions.

System designers should find ways to open the opportunity to as wide variety a set of providers as possible, while setting accreditation standards that are sufficiently challenging to reduce to an acceptable level the number of providers with the scale to find this market attractive.[62] The issue is considered in more detail in section 2.7 of this paper.

Similar arguments apply to the suggestion that barriers to entry ought to be lowered.

9. Permit employers or other groups to negotiate discounts

This suggestion also merits serious consideration, bearing in mind the limitation that it may place on the freedom of individual members to move from the existing provider. The potential for group arrangements within the mandatory saving system is considered in more detail in section 4.6.

10. Establish a government co-contribution

Since unregulated fees can be regressive, one way to balance this is for the government to contribute to members' accounts at a flat rate. This is done in Mexico, where each worker receives from the government a contribution of 5.5% of the minimum wage, roughly equivalent to 2.2% of the average wage (Grandolini & Cerda 1998). This has a higher proportional benefit of low-paid workers, who contribute less to the system.

Since redistribution in the proposed South African system is intended to take place through the mechanism of the PAYG system, which includes a flat-benefit social grant, this approach is less likely in this country, but further consideration may be given to the possibility.

11. Negotiate fee levels centrally

As an alternative to setting a fee benchmark through accreditation standards, consideration could be given to the options under which fees could be negotiated centrally. The Turner enquiry appears to have this in mind when it suggests, in its second draft report, that the National Pension Savings Scheme[63] "… should negotiate fund management mandates covering major asset classes (e.g. 6-10 in number) aiming for very low fees in return for the expectation of large fund volumes" (UK Pension Commission 2005: 376). It confirms this view in its third report on the issue, which followed extensive further consultation. The Mexican authorities have put in place a process that amounts to a form of negotiation. Fees that providers propose to charge must be approved by the Pensions Board .[64]

It is recommended, in contrast, that serious consideration be given to the alternative possibility that the accreditation standards themselves include fee limits, which might then be reviewed from time to time.

12. Restrict the types of charge

South African insurer-provided savings products are difficult to compare mainly because they are characterized by a large range of charge types, making it extremely difficult to compare the total impacts of charges for one product with the corresponding impact on another. Permitting only one or two charge types would facilitate clearer comparison of products. [65]

13. Restrict the level of charge

The ultimate regulatory restriction is to impose a limit on charges. Pricing limits can distort the operation of markets and should be imposed with care, but such limits would not be without precedent and are being seriously considered for the new individual account system in the United Kingdom (UK Pension Commission 2005; Department of Work and Pensions 2006a and 2006b).

[60] This forms part of the recommendations of the Turner review of the UK system (UK Pension Commission 2005).
[61] Refer, for examples of regulator-provided information, to the pricing comparison of the FSA in the United Kingdom www.fsa.gov.uk/tables and the SAFJP in Argentina
[62] Care should be taken not to impose inappropriate constraints on the form of entity able to provide services to the market. A fund owned by its members is a strong model accepted by many, but the possibility that the administering company is also a mutual entity is less frequently regarded as a possibility. Australia's industry funds operate on a not-for-profit basis and offer much better value than their equivalents in the profit-seeking part of the market, the master trusts. Care should be taken not to set out the legal characteristics of accredited entities in such a way that it effectively bars the entry of unanticipated forms of providers.
[63] This is the auto-enrol individual-account system proposed by the Turner report.
[64] This is formed by Federal Government, the Central Bank, Social Security organization and representatives of the Labour and Employers sectors (CONSAR 2007).
[65] Consideration should be given to other objectives when establishing a limit to the types of fees that may be charged. Gill et al. (2003:117) show that fees are proportionally higher for low-income contributors than for their high-income counterparts. Vittas (1998) reminds us that certain types of fees are regressive (flat fees are the most obvious example) and that there are other ways to address the cost problem.

This long list of possibilities serves to illustrate the complexity of issues affecting the system. A number of initiatives should be considered in combination.

Are price limits a serious possibility? In the light of persistently poor levels of competition across many parts of South Africa's financial services industry, price ceilings deserve serious consideration, at the very least, particularly in the context of policymaker-imposed compulsion and the consequent obligation to safeguard the interests of participants.

The next two parts of the discussion assume that price ceilings are to be considered and sets out some of the information required to assess the level and type of such a ceiling.

Setting a ceiling: level

This paper recommends that the fees of accredited providers are made subject to a ceiling. In practice, it must be decided what types of fees are to be permitted and what maximum level each of these fees should be subject to. The level of the cost ceilings is considered first.

> A number of regulators around the world have elected to impose maximum charges on market players, but with great care to avoid unintended consequences. If the ceiling is set too low, market players are driven out of business, reducing the existing competition. If the ceiling is set too high, aggregate costs may rise as providers drift towards the ceiling, leaving the consumers in a poorer position overall. (Rusconi 2004: 114)

The discussion below focuses first on the total allowable fee, considering it in asset-based terms, and then turns attention to the potential for the fee to be levied in alternative forms.

Adair Turner and his co-authors (UK Pension Commission, 2005) provide a good discussion of the process by which they arrived at their recommended fee limit. While the details of the argument are not particularly helpful, since they compare the UK system with the equivalents in Sweden and in the United States, which have much greater scale than is contemplated for South Africa,[66] the elements of the discussion are useful.

They suggest that the envisaged system could not be expected to operate as cheaply as a PAYG, which could be run at around 0.1%, but should be able to obtain the cost-efficiency of a large retirement fund, which they define as having around 5,000 members. Well-established independent analysis of the cost-effectiveness of the retirement fund industry, by fund size, is available in the UK and this is how the commission arrived at its proposed cost ceiling of 0.3% of assets per year.

Naturally there has been a great deal of discussion concerning this target, but the UK government has indicated its belief that it may be achievable, albeit only in the long term. In the process it illustrates some of the cost-reduction techniques discussed earlier in this section.

> The current system of private saving has a number of costs that can be reduced or eradicated in the system we are proposing. The use of automatic enrolment should drive down the costs of marketing and acquisition. The establishment of a central body would increase portability, reducing the number of times high start-up costs for accounts would be incurred. And the establishment of a central body would ensure that persistency of saving is increased, further reducing the costs of saving through fewer, but larger, pension funds. The exact cost of the scheme will be dependent on the final design, the financing of the scheme and the service it offers to consumers. We believe that 0.3 per cent may be achievable in the long term, depending on decisions we take on scheme design. (Department of Work and Pensions 2006a: 61)

Rusconi (2004) suggests that larger retirement funds in South Africa can be administered at as low as 4% of contribution, equivalent approximately to an annual 0.25% of assets under management at current industry ratios of contributions to assets. His analysis of the data provided by an Alexander Forbes survey suggests that asset-management fees for large funds average between 0.4% and 0.5%. Industry commentators have suggested that the survey of asset-management fees errs on the high side, since managers quoted the fees that they would hope to earn, not the fees that they actually achieve. This suggests that, for large arrangements like these, asset-management fees closer to 0.3% are quite feasible.

Putting administration and asset management together, and allowing a small margin to cover costs of other administrative functions such as communication and regulatory submissions, suggests a fee of around 0.6% of assets per year. This is acknowledged as a benchmark, a first step for the discussion that must follow this paper. Furthermore, it should be a long-term target rather than an immediate system objective.

Some allowance should be made for the cost of servicing individual members,[67] but a target of 0.6% for the very large arrangements envisaged by this proposal would be sufficient to permit sufficiently large providers to enter the market. This is significantly lower than current costs experienced across the industry, except in the largest occupational funds, but is twice the benchmark put forward for consideration in the United Kingdom, and would be considered by some commentators to be generously high.

Using the conversion factors implicit in Rusconi (2004), this suggests an equivalent fee of 10% of contributions.[68] The issue of how fees might be charged is considered next.

Setting a ceiling: type

As recent South African experience shows, charge types can be enormously complicated. While it is imperative that in an opt-out system charges are simple and easily comparable, careful thought needs to go into how fees may be levied and how any maximums should be expressed.

[66] The total operating cost of the Swedish system, with its clearing house, is 0.37% (of assets per year) for investors selecting the default option, higher for those who choose to invest in non-default funds, and is expected to come down to below 0.2% by 2020. The US Federal Thrift Savings Plan runs at a cost of 0.06%, but this probably ignores some cost arising elsewhere, like payroll and human resource costs. The President's Commission on Social Security Reform in the United States suggests a cost benchmark of around 0.30%, even with a wider range of funds that includes actively managed funds (UK Pension Commission 2005: 398)

[67] This assumes that the recommendation against blind allocation of assets to wholesale investment managers is accepted in favour of accredited-entity responsibility for client servicing and benefit payment.

[68] The conversion of one type of fee to another was carried out by Rusconi with reference to the then-current relationship between industry assets and contribution flows. The relationship between asset-based and contribution-based fees needs to be more carefully considered because it depends on a range of factors.

The UK's Department of Work and Pensions (2006b: 96) suggests that a charge structure for a personal accounts system should have a number of qualities. It should be

- simple and easy to understand, enhancing comparability across products,
- fair to all members, taking into account an individual's ability to pay, and it should
- incentivize providers to maximize fund value,
- incentivize members to assist to keep costs down, and
- provide significant revenue in the early years of operation, reducing the amount and length of initial operating losses, and reducing financing costs.

The final point is important. There is no market without providers. Set-up is not cheap and this cost must be met. The manner in which fees may be levied has considerable impact on whether providers choose to enter the market at all.

Steventon and Sanchez (2007) have carried out detailed analyses of five alternative structures for the UK system:

- an annual management charge, percent of the assets in an individual's account,
- a flat joining charge combined with an annual management charge,
- an annual flat fee, the same for all participants,
- a contribution charge, a percentage of each contribution, and
- a contribution charge combined with an annual management charge.

They show, not surprisingly, that the ideal charging structure depends on the priorities assigned to each of the attributes set out by the Department of Work and Pensions.

This is not an easy issue to resolve. Substantial further analysis will be required. To simplify the discussion in this document considerations are limited to the asset-management charge and the contribution charge.

> Analysis of the impact of different fee structures on workers and management companies shows that a management fee based on assets implies a lower cost for workers upfront but a higher cost in the long run. For management companies, a fee on assets implies a longer break-even and payback period, but greater profits in the long run, provided the level of fees is not reduced by market competition. But for newly created mandatory systems, asset management fees may have to be very high to ensure that management companies do not suffer huge losses at the start of the system. (Vittas 1998: 21)

As the Vittas quotation indicates, a key factor for providers considering entry to the market is the speed with which they are able to recover the capital expenses incurred in setting up the system. Asset-based fees make it more difficult for providers to survive the first few years of existence but may be more expensive for participants in the long run, depending of course on the proposed level of the fee and its alternatives.

Consideration could be given to permitting providers to charge on a mix of contribution-based and asset-based fees, to give them some scope to manage these financial risks. Three options, of roughly equivalent overall value on the mix of contributions and assets assessed by Rusconi (2004), might be:

- 10% of contribution,
- 0.6% of assets under management, or
- a combination of 5% of contribution and 0.3% of assets under management.[69]

Opportunities for gaming would need to be closed out. Examples of these are

- modifying the charging basis during the course of a contract, starting out with contribution-based charges and switching to asset-based charges as the level of savings grows, and
- using a basis that differentiates by the age of the customer, insisting on asset-based fees for younger customers who, by virtue of their longer expected saving span would generate greater profit this way and, conversely, requiring contribution-based fees from older customers.

Providers should not be given the freedom to change the basis for charges during the course of a contract and the charging basis chosen by a provider would be required to apply to all pension business sold in that period.

Even with conditions such as these, substantial potential for cherry-picking behaviour remains. The safest way to manage this would be to permit only one type of charge, contribution-based or asset-based, and require all providers to manage their businesses at or below the specified charge ceiling.

Should higher charges be permitted for more sophisticated mixes of assets, as is the case in Sweden (Whitehouse 2000b; Palmer 2000)? This is not recommended. If it is possible to gain higher investment performance through stock picking then managers should seek to achieve this performance at their risk with the reward of attracting future customers as a result.

Some may suggest that tight charge limits would encourage the widespread adoption of passive investment strategies, detrimentally reducing liquidity and increasing the volatility of market prices. This argument is self-defeating. If market volatility increases, active managers would seek to take advantage of this, in turn increasing the volume of trading, improving liquidity and tempering the volatility. Turner considered the possibility of market distortion through increased use of passive management and ruled out the potential risks (UK Pensions Commission).

Loyalty bonuses

The proposed basis rules out exit charges by omission, but it does not rule out the possibility of fees that reduce over the term of a contract to encourage savers to stay with their existing

[69] Great care must be taken in assessing the equivalence of different charge measures. The relationships current at the time of Rusconi's analysis will not remain constant over time. Furthermore, what works for the industry as a whole doesn't apply to sectors of the industry. These figures are put forward merely as examples.

providers. Consideration needs to be given to the alternatives of allowing it, on the basis that it discourages wasteful movement between providers, or explicitly outlawing this to prevent distortionary incentives to stay with providers even if they provide uncompetitive investment performance or service.

Another possibility is to legislate a fixed exit charge, sending a signal that movement between providers is not cost-free (and should not be) but controlling the extent to which providers could provide incentives to retain existing customers or attract the customers of other providers.

On balance, a small fixed exit charge is considered a possibility, but 'disloyalty penalties' are not supported.

Recommendations

It is recommended that the following thoughts receive further consideration:

- a contribution-based charge limit of 10% be considered in the long term,
- a mark-up on this limit of half again be permitted at launch, in other words 15% of contribution, and that
- charge limits should be reduced every year for a phase-in period until they reach the long-term target, and this phase-in period should be no more than ten years in length.

Later consideration of changes to the type of limited charge could be considered for new contributions, but not for accumulated assets, which would already have suffered the entry charge.

4.5 Commission models

Commission is a key subject of discussion at present. The South African long-term insurance industry is characterized by regulated commission scales, a series of rules setting out maximum levels of commission payable for each product. In many cases, the intended ceiling has become the de facto commission level, entrenching high costs and creating the impression that it is impossible to sell insurance products without paying commission at the maximum level.[70]

The impact of commission scales

> Much of the discussion that has taken place over the last year between policymakers and industry players has focused on the subject of commission. This paper seeks to demonstrate that commission is not the only source of the problems that have arisen, but that current commission scales are not in the best interests of policyholders and are a significant contributor to the inequitable burden of costs. (National Treasury 2006: 28)

The existence of the commission scales has been identified as one of the drivers of high costs in the South African personal pension saving (retirement annuity) environment, but only partly due to the cost impact of the commission itself. The scales have implications that reach much wider than this, for example,

- reducing the potential for a customer to negotiate commission levels with the intermediary,
- creating high up-front expenses for providers selling commission-paying products,
- perpetuating unfair distinctions between different types of providers falling under different regulatory frameworks,
- raising barriers to the entry of new providers who have to absorb these start-up costs, and
- reducing incentives to the intermediary to provide advice to the customer that is objective and only in the customer's interests.

The subject has been well covered by the National Treasury (2006) publication on the subject, which has indicated that commission scales are not expected to survive the retirement reform process but must, in the interim, be reviewed in order to reduce their potential to perpetuate some of the market distortions listed above.

Preconditions for removing commission scales

National Treasury (2006) proposes a number of conditions required for the safe removal of commission scales.

> While there is a strong case for deregulation, consideration must also be given to the conditions under which a market-determined approach to commissions would be appropriate. A market-driven approach should result in investor gains, provided that the market is characterised by effective competition. Preconditions would include: (a) an effective system of disclosure; (b) appropriate consumer and intermediary education; and (c) a financial safety net for investors (such as minimum early termination values). (National Treasury 2006: 30)

The National Treasury has indicated its view that commission scales are unlikely to survive the retirement reform process. This perspective is shared by the author of this paper. It is submitted that the terms set out in this paper meet the requirements for deregulation proposed by the team at National Treasury. Disclosure standards will be significantly higher (see sections 3.2, 4.7 and 4.8) and consumer education greatly enhanced by the simplification of product design, mandated by the system (section 4.1) and in practical terms enforced by the charge ceilings (section 4.4) that it is recommended receive serious consideration.

The fact is that, under this set of proposals, commission scales will be rendered unsustainable for the mandatory defined contribution environment by the terms set out in this paper. Entry to the system will be mandatory, but the choice of provider (and the decision of whether to opt out of the default fund) will be at the discretion of the saver. Providers will find creative ways to market and distribute their products.

Charges are likely to come down in the voluntary saving environment as well but this is the area in which face-to-face advice would be important and where adviser commission or fees may play a significant part in the process.

[70] This generalization creates a dangerous impression. Rusconi (forthcoming) shows that it is inaccurate, pointing out that, for endowment products aimed at low-income individuals, commission at the ceiling level is actually rare, most providers requiring that intermediaries share the costs of reaching a relatively unprofitable market.

4.6 Group arrangements

One of the benefits of the current South African system is that, where participants are arranged into groups, they are able to negotiate significant reductions to fees through the economies of scale that they offer. Recognition of the potential cost-saving is entrenched in some systems – for example, in Switzerland, where employers are required to provide occupational retirement cover (Queisser & Vittas, 2000) rather than forcing individuals to select providers.[71]

This paper considers at length the options for servicing members of the system – for example, deliberating the possibility of establishing barriers between providers and their customers to reduce costs. All things taken into account, it seems best to allow the relationship between providers and customers, establishing a culture of customer service and forcing the provider to take responsibility for the form of benefit (see section 4.2 and Appendix 2). But this has a down side, since providers must service customers in their capacity as individuals, potentially raising system costs.

Niemietz (forthcoming; a) suggests that group contracts should be permitted in the individual account system in Chile. Any effort to promote competition between providers and reduce system costs is supported. Significant economy of scale is possible at the take-on phase of the provider–customer relationship, even if servicing thereafter has to take place at the individual level.

The notion that arrangements could be entered into with employers, unions or other affinity groups that would offer the members of that group entry to the opt-out arrangement of a particular provider at a price that they would probably not be able to obtain in the absence of the group arrangement is strongly supported. It is recommended that this is limited to the take-on phase of the relationship. The concept should not be extended to the servicing of these members, because this runs the risk of a parallel market in group arrangements forming that would compromise the standards of servicing proposed in this paper (see section 4.8). Neither should providers be permitted to approach groups on condition that all members of the group sign up to that provider. This significantly compromises the freedom of choice underlying this system.

Group arrangements might also permit providers the financial 'breathing space' to consider paying significant incentives to intermediaries that bring such groups into the system. It is recommended that disclosure standards require that any remuneration is clearly communicated to representatives of the group and to all of the members covered by the group.

Finally, consideration may need to be given to a framework of governance for the group that appropriately protects their interests. If other requirements are properly safeguarded, this may prove unnecessary on the basis that the freedom of choice of every individual is entrenched in the system, but the reality is that individuals often wish to leave financial decisions to group representatives. Where they do so, the fiduciary obligations of these individuals must be clearly set out, perhaps extending to a trust arrangement of some description.

In summary, efforts to introduce economy of scale to the system by finding ways to aggregate individuals into groups of any size are supported, but it is recommended that

- such aggregation of servicing apply only to the take-on phase,
- it not be extended to a second, compromised, set of service standards,
- compulsory participation of all members as a condition of service be forbidden, as well as any pricing strategy conditional on a certain proportion of the group joining,
- disclosure standards make absolutely clear to group representatives and every member what Rand amount of commission is being paid to an intermediary, and
- consideration be given to the governance structures that would safeguard the security of the members of the group.

4.7 Disclosure principles

This section aims to set out some of the principles underlying the disclosure of product characteristics by accredited providers to the customers and potential customers. It should be read in conjunction with the somewhat overlapping discussions of reporting principles (section 3.2), primarily in the context of governance, and member information (the next section) in the context of servicing requirements.

> Some of the practices questioned by the [Pension Funds] Adjudicator include a significant reduction of the policy value on premature cessation or reduction of premiums. This situation results from a business model that recovers unrecouped expenses on early termination, but lacks appropriate up-front disclosure of, and agreement to, such practice in policy documents provided to the member of the retirement annuity fund. … While disclosure standards in the South African contractual savings environment have improved in recent years, they still fall short of international standards. (National Treasury 2006: 10, 11 & 16)

The standards of disclosure of insurers providing retirement annuity products have come under intense scrutiny from the National Treasury review of the contractual savings industry. Poor disclosure, currently subject only to industry self-regulation, has undoubtedly contributed to the difficulties experienced in this environment, not least in the surprisingly high charges imposed by providers. Consumers are clearly not sensitive to these charges (Rusconi, 2004).

A more recent study into the entry-level endowment products sold by insurers raises concerns about high charges, but notes particularly very wide range of charges, suggesting very low levels of sensitivity of consumers to charges. This may not be surprising, in light of one of the other findings of the study, that disclosure appeared sufficient to meet the self-regulated standards set by the Life Office Association, but that very little effort had been made to ensure that policy documents could be understood by the intended policyholders (Rusconi, forthcoming).

[71] Switzerland was the first country in the OECD to mandate firms to provide access to occupational pensions to their employees.

It would seem that we have a very long way to go before we can claim that disclosure standards in South Africa are sufficient for consumers to make choices based on the criteria that they ought to be using, those that are in their best interests.

In the notes that follow, some of the principles behind the disclosure standards in other countries are discussed. Then a set of criteria believed to be a requirement to guide the development of the disclosure system for the accredited opt-out environment in South Africa is proposed.

Disclosure in Australia

The disclosure rules in Australia are not set by the body responsible for pensions regulation (APRA, the Australian Prudential Regulation Authority) but by the Australian Securities and Investments Commission (ASIC), which has a much broader mandate over the activities of financial services firms. Since the code covers a variety of product types, it must be comprehensive, and it is.

ASIC (see 2004a and 2004b, for example) sets out detailed prescriptions on disclosure, for example, requiring providers to furnish dollar values, not percentages or other figures that could be misinterpreted. It also sets out a set of good disclosure principles, in recognition of the fact that setting appropriate detailed-disclosure requirements in every instance could be difficult.[72] These principles (ASIC, 2005) are summarized as follows (as quoted also in National Treasury, 2006). Disclosure should:

- be timely,
- be relevant and complete,
- promote product understanding,
- promote comparison,
- highlight important information, and
- have regard to consumers' needs.[73]

Latin American individual-account systems

> Rules governing disclosure to plan members, external audit and reporting to the supervisory authority are also applied widely and effectively in Latin American countries. (Gill et al. 2003: 44)

The comparability of products in the mandatory savings systems of Latin America is considerably enhanced by a degree of forced uniformity on products, in design, contribution levels and charge types. The regulators in the region take very seriously the importance of improving consumer understanding of products and the effectiveness of their choice of provider, and play an active role in providing accurate comparison of products (see footnote 61 in the discussion of charges, section 4.4).

More details on the types of information provided to members in Chile are discussed in section 4.8.

United Kingdom

The UK authorities set high standards of disclosure. It adds to these by adding a further layer of requirements for a product to be described as 'accredited' by the regulator (Johnston 2000). The CAT standards, as they are known, set minimum requirements in three areas:

- **Charge.** Products must met limitations on the mix of allowable charges and on the overall level of the charge.
- **Access.** Standards are set that specify minimum acceptable lump sums and regulator contributions (which is really about affordability rather than access) and these are combined, for some products, with minimum portability and flexibility requirements
- **Terms.** Additional requirements concerning the conditions under which products may be provided.

South Africa has made some progress in this regard through negotiations that fall under the Financial Sector Charter. This has resulted in a set of minimum standards for bank accounts and a similar set of standards for funeral products provided by insurers. So far, no equivalent benchmark has been established for savings products, ostensibly because there remains too much policy uncertainty in this environment.

Recommendations

> Costs are opaque. This is particularly so in the life insurance and retirement funds environments. My difficulties gathering data suggest that industry consumers would find it very challenging to compare providers on the basis of cost. … Simple summary figures, with straightforward explanations, would assist the investor (1) to understand the real impact of charges, (2) to compare intelligently across products and (3) to make informed decisions regarding the savings channel appropriate to their needs. (Rusconi 2004: 112)

Establishing the disclosure obligations of providers to this industry is not easy and proposals on the details of such disclosure are beyond the scope of this document. It is recommended that the following steps are taken to identify the needs for disclosure and put into place a system that addresses these needs:

- A degree of product standardization, to make products easier to compare, acknowledging that this is a mandatory environment and that the regulator has an obligation to establish a safe system. Providers can exercise more freedom in the voluntary space, and perhaps should do so.
- Standardized, regulated disclosure requirements, established by the regulator and tested with consumers prior to implementation and on an ongoing basis thereafter.
- Certain public disclosure responsibilities for the regulator – for example, an accessible set of comparative prices.

[72] While the South African authorities are probably in a good position to set the detailed requirements, since the opt-out environment is expected to be reasonably standardized, these principles should still be taken into consideration when drafting these disclosure standards.

[73] Further details on the Australian approach to disclosure, together with an appraisal of these disclosure standards against international alternative, including South Africa's, are available in Clare (2002).

National Treasury has earmarked improved disclosure as a high priority for the future and provided an excellent set of principles proposed as appropriate to accredited providers just as much as to the insurers for whom they were designed. In its discussion of possible changes to the contractual savings industry, National Treasury recommends that the following principles be used to guide a revised set of disclosure standards:

- **Timing of disclosure:** Relevant information concerning potential policies and the advice backing these policies must be provided in a timely manner.
- **Frequency of disclosure:** Relevant information should be provided on a regular basis, at least annually.
- **Independence of disclosure standards:** Self-regulation of transparency standards, whilst useful, can never be truly independent. The standards of disclosure must become part of the regulatory framework, as is the case in most countries.
- **Clarity of presentation:** Language must be clear and simple, numerical descriptions straightforward and unambiguous and disclosure documents must not be cluttered with unhelpful information.
- **Consumer testing:** Disclosure only works to the extent that it is understood. All disclosure proposals should be rigorously tested for their potential to improve consumer understanding.
- **Comparability:** Disclosure standardization must permit clear and easy comparison of equivalent products. (National Treasury 2006: 19 & 20)

These principles are heartily endorsed here and recommended as key to the establishment of the standards required of participants to make informed choices.

> In closing…
>
> … information disclosure in the insurance industry is poor in practically all jurisdictions … (World Bank 2005: 163)

It should be of little consolation to South African insurers that they share a poor trait with their counterparts in many other countries. Poor disclosure in a voluntary saving environment indeed requires serious attention, but in a mandatory environment, sub-standard disclosure is completely unacceptable.

4.8 Service requirements

This section discusses an issue that has links with a number of others covered earlier in this paper: the minimum standards of customer service that accredited providers will be required to meet. Cross-references are noted where relevant.

The need for service standards

Why should service standards be set and monitored? The focus of the discussion here is the participant. The imperative to protect the interests of customers through establishing standards not only of governance and product but also of service is designed to meet a number of system objectives:

- high levels of public confidence in the system,
- high levels of participation and correspondingly low levels of evasion,[74]
- establishing a sound basis for public comparison of provider charges, on the basis that they all meet (high) minimum servicing standards, and
- reducing the potential for providers to cut corners on service delivery in order to reduce costs and increase profitability.

The most important disadvantage of setting service standards is that some form of monitoring needs to be undertaken, preferably with a profile sufficiently high to convince service providers that compromises will not be tolerated and sanctions imposed in line with the provisions of the regulation.

Since it is expected that the number of providers is to be small, one option is for statistics to be gathered on each provider on issues relating to the integrity of the sales and customer servicing process, for example:

- **persistency statistics:** the proportion of customers remaining with a provider 6 months, 1 year and 3 years after purchase,
- **sales satisfaction:** customer approval of the sales process, based on data surveyed within a limited period following the sale, by an independent organization,
- **customer response times:** audited statistics on the success with which participant queries are resolved by providers, and
- **customer satisfaction:** participant approval of servicing levels, based on randomized surveys of participants, also by a credible independent provider.

This could be implemented in the absence of clear service requirements, but objective measurement would be assisted by the existence of such standards. The goals of such measurement, apart from improving the levels of public and participant confidence in the system, include promoting competition by providers on the basis of customer service standards.

The benefits of these initiatives need to be weighed up against the cost of funding the surveys. The same reasoning should be extended to the provision of minimum service standards in general terms. In an environment of the scale envisaged for the accredited opt-out industry, these costs would not appear to be unreasonable.

Communication requirements

Minimum communication standards are referred to in those parts of this document that cover reporting principles (section 3.2) and the options concerning disclosure (section 4.7). Here we are concerned not so much with the technical content of documents but with the standards of communication required of service providers to their members.

The Chilean authorities require pension funds to provide the following types of information to participating members (SPFA 2003):

[74] Mandatory participation does not guarantee compliance. The difficulty is measuring compliance: those who manage to avoid participating are likely to be rather difficult to detect.

- **Four-monthly summarized statement.** All members whose account has shown movement[75] are sent a summary of all deposits, charges and balances, both in pesos and in UF. [76] The form for such communication is specified by the regulatory authority so that members experience consistency of communication across providers, and statements must be provided separately for different types of accounts.[77]
- **Comparative standardized performance information.** Included in the four-monthly statement is a table, calculated by the Superintendency, which shows standardized performance for each provider, at five different income levels and over five different historical periods, net of costs. Note that both the calculations and the format are specified by the regulator and that this information is sent to members every four months. This surely has positive impacts on the comparability of providers on the basis determined most appropriate by the authorities.
- **Performance of the fund.** The statement shows the performance obtained by the individual but also the yield of the whole fund, the latter being independent of accumulated balance or charges and therefore the same across all members of the fund.
- **Comparative charges and social security cost.** For each of the income levels at which the standardized performance income is published, also with each four-monthly statement, providers must include comparative tables showing the charges of each provider and a calculation of the monthly social security contribution.
- **Default fund assignment.** The default investment mix for members depends on their age. In those instances where the age of a member would result in a reallocation of their accumulated balance from one investment fund to another in the absence of an election to the contrary (see the discussion in section 5.4), information about such a transfer must be sent to the member. Communication on the issue must commence a year before the first transfer of funds and continue for up to a year after the final transfer.
- **Social security book.** The fund must provide to the member a social security book, in which the member may request the balance in his or her account, in pesos and UF, whenever they think it fit.

In addition to this, all providers must produce two other types of information. They must make available, in every branch office, an information board that meets the specifications of the regulator concerning charges, details of the provider and details of each of its pension funds. They must also produce information leaflets for the general public, written in simple language and covering a list of specified subjects.

Other countries follow similar approaches. Regulations issued by Mexican authorities, for example, include detailed specifications of the material that must be made available in provider branches and on their web sites.

Some of the difficulties

The Turner review of the United Kingdom environment provides excellent food for thought to those responsible for determining exactly what types of material should be included in standardized communication. The report suggests that careful consideration is required concerning a number of aspects of the communication design:

- **The benefits of information and guidance versus the dangers of implicit advice and false assurances.** While it is clear that basic statistics concerning the account balance and the investment return recently gained must be provided, there are some areas in which care must be exercised over the manner in which information is presented. It is natural to describe investment options in terms of expected high and low returns and corresponding high and low risk, but the guidance must make it clear that no guarantee is implied by this expectation. Indicative projections provide the opportunity to educate members about the benefits of delayed retirement – if it is possible – but also carry the risk of a guarantee.[78]
- **The trade-off between comprehensiveness and operational complexity.** In theory, the centralized pension arrangement in the United Kingdom could produce benefit statements that include pension saving from all sources. In practice this would be prohibitively complex and expensive. The report recommends that benefit statements combine all savings in mandatory arrangements with accruals already gained in state PAYG systems and likely to be accrued in the future. It suggests that the potential for combining this information with private pension savings be considered at a later stage. This would seem to be a reasonable approach and it should form the starting point for considerations in South Africa.
- **Appropriate frequency of communication.** Statements sent with greater frequency than, say, annually would be appreciated by some members, but increase the cost of communication and risk being ignored. The Pension Commission recommends the provision of high-quality annual statements, arguing that this is the benchmark that has been established by private-sector counterparts, and that, since existing state pension projections are carried out annually, an integrated account balance with projections could be sent no more frequently than this.

There would seem to be some middle road possible, with projections on an annual basis and simplified account summaries sent more frequently than this, twice a year or quarterly, perhaps even every four months as the Chilean providers do.

A comprehensive proposal on member communication standards requires careful consideration of a range of issues and is beyond the scope of this paper. The point made here is that the issue must be given adequate attention by system designers and regulators. Prospective providers should be prepared for

[75] The 'movement' referred to by SPFA excludes fluctuations in investment value, it is assumed, otherwise statements would need to be sent to all participants whether active or not.
[76] The UF, or unidad de fomento, is the monetary unit for all pension payments and is indexed to the consumer price index.
[77] Voluntary Savings Accounts and Compensation Savings Accounts are separately defined from the main mandatory contributions under the legislative framework.
[78] The report includes example tables from the Swedish system that show admirable balance between displaying all of the relevant information concerning the current account the potential retirement benefits, but do so in a way that retains simplicity. Turner criticizes it for taking too conservative a view on investment returns, but it is particularly effective at showing the benefit of delaying retirement (UK Pension Commission 2005: 390 & 391).

compulsory regulated member communication of a high standard and should consider ways in which they might compete on the quality of the information that they provide.

Management of data

Data management is touched on in the discussion covering governance requirements (section 2.2) and their practical implementation (section 3.1).

The subject is included in this section as a reminder that data management ought to be subject to system security requirements, giving the supervisor the power to establish early warning of potential breaches, and to order providers to make the appropriate changes to computer systems in order to maintain the security and integrity of all member data on record.

Treatment of member resignations

A crucial area for minimum standards concerns the treatment of members on resignation, technically a request to switch contributions or transfer assets away from the current provider.

If system rules require that members invest with only one provider then a contribution switch automatically involves a loss of existing business with a transfer of assets. Minimum rules concerning the treatment of such requests form an important part of the overall standards of servicing across the industry.

Probably the most important measure of the effectiveness of a provider's service to an exiting member is the speed with which it executes the instruction to disinvest assets and transfers them to the receiving provider. This is noted in the OECD's core principles on occupational fund regulation:

> Individuals have the right to timely execution of the request to transfer the value of their vested benefit accruals. (OECD 2004: 8, paragraph 5.11)

Regulation should set standards for turnaround of such instructions and the information provided to the transferring member together with provisions for compensating members disadvantaged by provider inefficiency or unwillingness to act on instruction with appropriate speed. Other provisions should be established to support regulation designed to mandate service standards to exiting members.

The possibility of an exit fee is touched on at the end of section 4.4. Unlimited exit charges are not desirable because they prevent legitimate and informed movement between providers, but a standard statutory exit charge may be appropriate to cover the costs of such transfers and help members to recognize the consequences of switching between providers.

The charge should be approximately sufficient to cover the costs of the transfer. Arguments that exit charges should also cover some of the sunk costs of the provider are of merit in today's environment in which the costs of issuing a contractual savings product are high, particularly with commission-incentivized intermediaries. Similar arguments are far less likely to have validity in the environment established for accredited providers in which limits on overall fees – explicit or implied by the operation of the market – are such that distribution and take-on costs are substantially lower than in today's environment.

5. INVESTMENT REQUIREMENTS

At the core of a funded retirement saving system is the investment of the accumulated assets of participants. The investment strategies chosen by participants can have a significant impact on the value of retirement benefits, but also on the risks to which these accumulating personal assets are exposed. The importance of sound selection of asset classes, complex as it might be, is difficult to overstate and participants need to be guided carefully through the process, if indeed they are to have any choice in the matter.

> Extensive regulation is needed because workers often lack the expertise to invest wisely and because private pension companies might exploit their ignorance. Some private investment managers might take too many risks to maximize yield and attract affiliates, whereas others might be too conservative to keep up with productivity and inflation. Given the long term of pension investments, it may be too late for workers to recover financially through new saving once the damage becomes evident. … Regulations are designed to protect both individual workers and society from perverse competition in the face of information deficiencies. This protection is particularly important in a mandatory program. (World Bank 1994: 218-219)

In this part of the paper, aspects of the investment of participant assets are discussed, starting with consideration of how these assets are to be protected and moving on to the subject of which asset classes should be permitted and whether the allocation to these investment types should be specified or limited in any way. A number of countries require providers to guarantee investment returns at a specified level. Consideration is given to the issue of whether there is any place in this system for such guarantees. Finally, the thorny question of whether participants should be given investment choice is discussed and, if so, how this process might be controlled.

In many of the recently reformed countries, capital markets were weak prior to the implementation of mandatory saving requirements and private-sector providers did not have a great deal of experience in managing large pools of assets. In many of these cases, the authorities adopted a very careful approach to the management of assets ? some describe it as 'draconian' ? stifling competition in the interests of member protection:

> The herding instinct among pension fund managers is particularly worrying in the context of an industry that is increasingly the dominant investor in bond markets. To the extent that a few pension fund managers that invest in a similar way dominate capital markets, it is unlikely that market liquidity will grow to the levels observed in OECD countries. The increasing process of

> concentration in the pension fund management industry, while efficient with respect to economies of scale in account management and record keeping, will only put investment decisions into even fewer hands. (Gill et al. 2003: 52)

Many of these countries subsequently introduced a gradual liberalization of these rules as markets developed[79] and both customers and providers grew in experience and competence.

Despite the importance of establishing a South African system appropriate to the conditions and needs of South Africa, we must learn the appropriate lessons from these countries. We can expect our system to share with theirs the key characteristic that, despite the planned allocation of half of the contributions to the PAYG system, the fund will grow to become a significant portion of total investable national assets. As this happens, the potential for government intervention will become more significant.[80] Protection against this possibility must be established at system launch, not when the conflicting priorities become a reality.

5.1 Management of investments

Rules governing the management of investments by the accredited retirement institutions (ARIs) are inextricably linked to governance and regulatory requirements, discussed elsewhere in this paper. This section concentrates on two aspects specific to investments, administrative requirements and custody rules, but it starts by considering briefly the overarching principles that would help to establish the seriousness with which ARIs are expected to take their responsibilities to their members.

Legal framework & fiduciary responsibility

The structure within which the investment of assets takes place is very important to the successful operation of the asset management process, to the benefit of members. In all Latin American countries bar Mexico, the pension funds themselves are legally separated from the fund administrators and the funds are owned by their members. In Mexico, the funds are independent legal entities with their own boards of directors.

The approach of legal separation is supported. The assets of the fund must, in law and in fact, belong to the members, as in South Africa's collective investments environment, separate from the administering entity, the ARI in our case. The ARI is no more or less than a management company mandated by the owners of the fund to manage its assets on a contracted set of terms and fees.

The second overarching principle concerns the responsibility of the managers of the funds.

> In Chile, the pension fund administrators must have some independent directors whose duty is to guard the interest of the affiliates. Chilean regulations also set forth a high principle of fiduciary responsibility: AFPs [registered pension managers] should ensure the adequate profitability and safety of the investment of the funds they manage. They are obliged to reimburse the pension fund for any direct damages they may cause, whether by omission or commission. (Gill et al. 2003: 43)

This provides the type of principles that should flow through the regulations into the investment and management practices of the ARIs.

Administrative requirements

A strong case could be made for the position that the supply side of South Africa's investment market is unnecessarily complex and that elements of the sometimes long chain between the first supplier and the end user, the member of the fund, do not add sufficient value to justify their contribution.

The fundamental issues are that

- not all of the suppliers provide services that add value to fund members in excess of their cost,
- significant vested interests perpetuate this inefficiency, and
- defensive positions are often adopted by trustees to protect against potential negative outcomes rather finding the best balance between downside risk and upside return potential.[81]

It is suggested that ARIs be required to provide investment services on a straightforward, transparent basis that improves accountability and competitive forces. Wrappers should not be permitted. ARIs must manage their own investments, with outsourcing where necessary but without any additional layers. This would spread investment decisions across a broader range of portfolio managers who are directly accountable to the fund.

This is a complex policy area. The merits of this arrangement versus fully outsourced arrangements should be assessed thoroughly.

> The investment of pension funds [in Latin America] is subject to a comprehensive prudential regulatory framework. In each country that has reformed, all liquid financial assets bought by pension funds must be traded in secondary markets and valued at market prices. For the less liquid assets, the supervisory authorities of some countries, such as Mexico, set a valuation mechanism based on historical prices and valuation of related securities. *Such a method was originally designed with a view to ensuring the comparability of pension fund portfolios and permit adequate monitoring by the regulator, CONSAR. It is now expected that insurance companies and mutual funds will be required to use the same valuation method. (Gill et al. 2003: 44–45; footnote included in italics)*

Rules for the administration of ARI assets must include specification of the valuation of all assets and calculation of investment performance. This should not present significant difficulty in the current South African framework with its strong focus on assessing assets at market value, but monitoring of the calculation methodology and implementation must form part of the responsibilities of the supervisor, properly resourced.

[79] Between 1998 and 2002, the assets held by pension managers, expressed as a percentage of GDP, grew from 40.3% to 55.8% in Chile, in Argentina from 3.3% to 11.3%, in Bolivia from 3.9% to 15.5%, in Mexico from 2.7% to 5.3% and in Uruguay from 1.3% to 9.3% (Gill et al. 2003: 49).

[80] Chilean managers hold more than 60% of all government debt and their Bolivian counterparts more than 30% (Gill et al. 2003: 50; figures from 2002).

[81] The widespread prevalence of fund-of-fund arrangements in a market with a very limited set of investable securities appears to support the premise that trustees aim to avoid trouble rather than focusing on obtaining the best outcome for their members, all things considered.

The investment rules must manage conflicts of interest, which occur most commonly through self-investment, but can take place in other ways.

> Possible conflicts of interest [in Latin America] between pension fund managers and related entities arising from the investment of pension funds are also strongly regulated. All countries set low limits on investment in securities of issuers related to the pension fund managers. (Gill et al. 2003: 45)

Many countries also explicitly address the potential for collusion between pension fund managers, a potentially serious issue in an environment with a low number of providers. In Chile, funds may not "form an association or act in a block in order to exercise their shareholder rights" (source: regulatory code) though the regulation leaves scope for explicit authorization to be granted to managers to act jointly at board elections.[82]

Custody

Countries take various approaches to the issue of custody. **Chile** requires a substantial portion ? notably not all ? of a fund's assets to be held in custody:

> Securities [in Chile] representing at least 90% of the value of the Pension Funds must be held in custody, in the Central Bank of Chile, in foreign institutions authorized by the CBC or in private securities deposit firms. … This service must be provided by institutions which have the necessary infrastructure and oversight to perform these activities. (SPFA 2003: 81)

While Chile does not insist on separation of custody from asset management, **Hong Kong** mandates independence of the custodian from each of the investment managers appointed by the pension funds. The legislation governing the Mandatory Provident Fund System does not specify registration requirements for custodians, but limits the entities that may assume the role of custodies and stipulates eligibility criteria for custodians assuming the role of custodians (MPFA 2007).

Custody is discussed in section 2.2 and in Appendix 1. It is recommended that the custodian be independent of the administrator and asset manager, that it may not entrust assets to a third party and that it must take on whistle-blowing responsibilities. A World Bank paper puts forward some ways in which this responsibility might be given effect:

> Custodian institutions, acting as a depository for assets and guaranteeing the integrity of the fund is a central part of the financial regulation of pension funds. Custodians should report to the supervisory agency with the same frequency as managers, and data from the two sources should be cross-checked. Also, custodians should be informed of investment limits and be required to refuse any transaction that would violate these limits. (Demarco et al. 1998: 15)

5.2 Investment classes

A crucial issue for consideration by the designers of the mandatory defined contribution system is how assets may be invested and whether limits should be applied to investment by ARIs in various asset classes. Regulation 28 currently specifies investment limitations for pension entities. Most commentators agree that review of this system is long overdue.[83]

There are good reasons to consider a different approach to investment limits in the mandatory system, for example,

- system participation is compulsory, increasing the importance of appropriate care of the accumulated savings of participants;
- clearly defined ranges for distinct products would make it easier for customers to make choices from among the available options and would add to their confidence in the reliability of the investment characteristics of these products; but,
- tight limits on asset allocation may lead to herding behaviour by managers and investment performance varying within narrow ranges, reducing the effectiveness of competitive forces and the extent to which participants can distinguish meaningful differences between providers; and,
- within a relatively short period of time, accumulated assets will be significant, so investment limits that are too restrictive may distort the distribution of assets through the economy.[84]

This section considers whether limits should be placed on the assets that the ARIs may invest member contributions into. It asks as well whether there are alternative ways to control the risks to which participants are exposed.

Lessons from abroad

> One of the most controversial aspects of pension fund regulation is the use of strict investment rules, not only in the newly created compulsory personal pension plans in Chile and other Latin American countries but also in many OECD countries, especially in continental Europe and Japan. The main criticism is directed at the prohibition of, or low limits on, investments in overseas assets. But the low limits on equities and the tendency to use pension funds as captive sources for financing government budgets or social investments, such as low cost housing and low interest mortgages, have also caused concern. (Vittas 1998: 22)

Vittas uses this paragraph to open his survey of the types of approaches that might be used to restrain investment risk in pension arrangements. He points out that one of the main defences against inappropriate investment management is not a set of limits but a fiduciary responsibility. The prudent-person approach is used in some OECD countries, mainly the Anglo-American instances, but is gaining acceptance in other developed countries. This approach permits fund managers to set their own investment guidelines and avoids, in Vittas's words,

[82] Chilean regulations impose significant responsibilities on pension-fund managers to attend shareholder meetings of the companies in which they have invested and they must vote in all agreements of these firms.

[83] Some would suggest that South Africa finds itself in a regulatory vacuum, suggesting that the long-awaited changes to Regulation 28 have been delayed by the need for a comprehensive review of exchange control policy. The ordering is probably correct. However, there are aspects of the investment limits on retirement funds which are not affected by foreign exchange policy but do require review. A 75% ceiling on equities may be appropriate for a defined benefit fund, but this forces inappropriate constraints on the investments of the individual members to which it is now being applied.

[84] This is particularly relevant for government bonds. Policymakers find it difficult to resist the temptation to use the growing accumulation of assets in the mandatory system as a source of demand for debt issues. Sensible controls should be implemented from the beginning to protect against this possibility.

"the pitfalls of government direction of funds and government interference with market processes and especially with financial innovation" (1998: 22).

Investment limits can be misused when government takes them too far. The potential for government interference in an otherwise private-sector system can have serious consequences:

- Prescribed investments in South Africa in the 1970s and 1980s substantially underperformed their free-market counterparts.[85]
- Rofman (2003) lists 13 actions by the Argentine government that undermined the security of members' benefits, including forced investment in government treasury bills and the suspension of new annuity contracts, which forced workers to remain on a scheduled withdrawal program for two months. Aggregate investment in government debt had reached, at the time of his writing, 77.5% of the total portfolio, hardly a healthy situation considering that the Argentine government had already defaulted on part of its debt.[86]

Demarco et al. (1998) set out four broad approaches used by regulators to restrict pension funds investments. These are limits:

- on **foreign exposure,** to avoid mismatching assets and liabilities, but also to stimulate investment in domestic markets,
- by **issuer**, to avoid concentration of investments,
- by **risk,** to avoid assets with poor ratings, and
- on **self-investment,** more precisely investment in assets issued by companies with a significant economic relationship with the managing company, to avoid conflicts of interest.

As discussed by Gustavo Demarco and his co-authors, all of these restrictions are difficult to police and require careful supervision.

Vittas (1998) points out that limits on risk are usually expressed as maxima or minima in asset classes, which are easier to comply with and police, but still subject to the creative use of alternative investments by providers. He suggests that investment-class limits are much better expressed as maxima than as minima, protecting against inappropriate risk rather than forcing investment in certain asset classes, most commonly government-issued debt. He adds another class of restrictions, namely limits on borrowing and leverage.

Country survey

All of the reformed Latin American systems impose limits on asset allocation through ceilings.[87] Hong Kong imposes investment restrictions in three different ways (MPFA 2007), through

- **quantitative investment limits,** which place explicit limits on investment in individual securities or assets classes, for example a minimum of 30% Hong Kong dollar content;
- **qualitative investment limits**, which restrict investment behaviour in other ways, for example imposing restrictions on borrowing and lending of securities and requiring investment of securities listed only on approved stock and futures exchanges; and,
- **a statement of investment policy**, which supports the limitations through a written policy, bringing into play the prudent-person approach that underpins the trust-based foundations of the Hong Kong Mandatory Provident Fund system.[88]

A few Latin American systems impose floors as well as ceilings. These are more dangerous as they are more likely to produce distortions to market mechanisms and substandard investment returns to the members. Costa Rican funds must invest at least 15% in mortgage securities, presumably to stimulate the housing market, but they must also provide an investment return no less than that of the mandatory pension system. In Uruguay, pension funds must invest between 40% and 60% of assets in government securities. At least 51% of pension fund assets in Mexico must be invested in index-linked securities (Gill et al. 2003; figures as at the end of 2002).[89]

High levels of investment in government bonds in Latin America (see the table below) are partly due to regulatory policy, but also due to the absence of credible alternatives. As Gill et al. (2003) point out (in agreement with Niemietz, see footnote 86), liberalization of these limits need to be accompanied by modernization of the financial market infrastructure and regulatory reform within the financial sector.

Detailed consideration of possible quantitative investment limitations should include the OECD (2006b) summary of the restrictions in existence across member countries.

South Africa cannot afford to be complacent in this regard, but it has a financial sector with good diversification of investment types and a sound regulatory framework. This suggests that the primary consideration around investment limits should be a focus on protecting participants against inappropriate risks and conflicts of interest.

[85] Real returns on 'prescribed investments' in South Africa were -3.6% in the 1970s and -0.9% in the 1980s, compared with corresponding real returns on equities of 13.2% and 5.6% (World Bank 1994, referring to Vittas 1994). In the US, special investment stipulations for state and local workers decreased yields (World Bank 1994).
[86] Niemietz (forthcoming; b) suggests that this situation is exacerbated by poorly developed domestic markets. Whether the liberalization should precede the development of capital markets or would stimulate just such a development is a complex subject for discussion that is probably not relevant to the well-developed South African environment. The two often go together.
[87] As at the end of 2002, for example, Argentine funds could invest no more than 80% of assets in government securities, 30% directly in financial institutions, 70% in listed shares, 40% in corporate bonds, 30% in investments funds and 20% offshore. It should be noted that most countries are gradually liberalizing their investment limitations. In 2001, Peru first permitted investment in offshore assets (Gill et al. 2003).
[88] Investment limitations do not preclude the use of prudent-person principles.
[89] This applies only to SIEFORE Básica 1, the fund designed for above 56 years of age. The portfolio risk of this fund is also subject to a risk threshold, with a 1-day value at risk limit of 0.60% (CONSAR 2007). Risk-based limits are growing in prevalence and can be designed to address the core of the issue – managers investing in a way that introduces inappropriate risk – without bringing the distortions that conventional limitations are prone to introducing.

Table 4. Investment mix of Latin American pension funds, December 2002

%	Government securities	Financial institutions	Corporate bonds	Equities	Investment funds	Foreign securities	Other
Argentina	76.7	2.6	1.1	6.5	1.8	8.9	2.4
Bolivia	69.1	14.7	13.4	-	-	1.3	1.5
Chile	30.0	34.2	7.2	9.9	2.5	16.2	0.1
Colombia	49.4	26.6	16.6	2.9	-	4.5	-
Costa Rica	90.1	5.3	4.6	-	-	-	-
El Salvador	84.7	14.4	0.5	0.5	-	-	-
Mexico	83.1	2.1	14.8	-	-	-	-
Peru	13.0	33.2	13.1	31.2	0.8	7.2	1.6
Uruguay	55.5	39.6	4.3	-	-	-	0.5

Source: Gill et al (2003:51) from national and umbrella organizations.

Note: information for Colombia refers only to the mandatory system. Empty cells represent zero allocation.

Offshore investment

South Africans have for decades been strongly conscious of the restrictions placed on the free movement of capital out of the country. This is a contentious subject often more emotional than logical. Any discussion of the potential for higher (or lower) limits on investment offshore of assets under the accredited system must properly allow for the current policy of gradual liberalization of exchange controls.

What many may not realize is that restrictions on offshore investment are not rare and exist even among developed countries (figures from OECD 2006b).

- **Slovakia** requires that at least 30% of pension assets much be invested in local securities.
- **Mexico** imposes a limit on foreign assets of 20%.
- Personal pensions in **South Korea** have foreign assets limited to 20% of the value of the fund.
- **Germany** imposes asset limits specific to investment classes, for example no more than 10% of assets in non-European Union equity and no more than 10% in non-European Union bonds.
- **Switzerland** requires that no more than 30% of assets are invested out of the country.

Advantages and disadvantages of offshore investment limits

The World Bank (1994: 192) provides an excellent summary of some of the pertinent issues around regulated limits on offshore investment. It suggests that the most common reasons for restricting investment offshore are:

- general capital account restrictions,
- a philosophical belief that savings belong to the home country and should be invested there, and
- fear that incomplete information about foreign markets would result in poor decisions and poor investment returns.

To this could be added two further motivations for restricting offshore investment:

- member liabilities – that is, their post-retirement financial commitments and aspirations – are largely in South African Rand and it is inappropriate to expose them to currency risk through offshore investment above a level sufficient to diversify the portfolio,[90] and
- investing member contributions in local projects could be seen as being in the best interests of members because it stimulates benefits to them outside of the financial returns gained from the investments.

The World Bank contrasts this with the following advantages of offshore investment:

- it reduces exposure to the country-specific risk of the home country, offering protection against local risk of inflation, for example, and
- it offers the potential for higher investment returns through access to booming economies.

To this could also be added the argument that offshore investment expands opportunities for diversification by providing opportunities to invest in industries not available in the home country, like mining, for a country that has poor natural resources, or technology shares, for a country with poor infrastructural development.

The strongest concern with such limitations is that a capital restriction is effectively a tax that affects the poor more than the rich:

> Any restriction on capital is like a tax. The rich can often avoid the tax by evading capital controls, while middle- and low-income residents with a substantial share of their savings tied up in funded pension plans bear the full brunt of financial repression. Only if part of their funds are [sic] invested overseas are they protected from an increase in financial repression at home. Pension

[90] Three further points should be made in this regard. First, member liabilities are not all Rand-denominated, but it is only the wealthier members of the system who have aspirations to live outside of South Africa in their retirement, or travel widely, so meeting this objective is not a high priority of the policymaker. Second, from a risk-return management perspective, some international diversification is optimal in any case, even with liabilities all in Rands, because the diversification outweighs the mismatching, to a point. Third, there are ways to gain exposure to foreign countries through local investment, gaining access to international diversification without investing offshore.

> reserves that are confined to domestic markets can be eroded gradually, through modestly negative real rates of return, or more suddenly, through forced shouldering of losses elsewhere in the economy, as, for example, when governments pass large banking system or state enterprise losses on to the pension fund, leaving it insolvent. (World Bank 1994: 192)

Examples of systems badly affected by investment restrictions (to asset classes, not just to offshore investment) are provided by the Zambian National Provident Fund (Bailey et al. 1997), which suffered negative real returns for many years, and the Argentine individual account system, required at a critical time to invest in shaky government debt (Rofman 2003). Both of these systems would have benefited from greater investment outside of their respective local markets.

Despite these examples and many others, fears concerning the danger of concentrated local investment are probably misplaced in South Africa. This country has a strong, diversified domestic market, and it has already shown a strong commitment to liberalizing offshore investment limitations, recognizing the need to do so in order to retain significant inflows. This supports the World Bank view, which follows on from the earlier quotation:

> Governments can minimise the loss [of capital outflows] by improving the conditions for domestic financial markets and easing capital controls more generally. Easy capital outflow helps stimulate capital inflows, because a prime concern of international investors is to be able to get out of a market quickly when the need arises. (World Bank 1994: 192)

South Africa's policymakers are aware of these issues.

Offshore investment: concluding comments

> Allowing pension funds to diversify contributes to the credibility of domestic stabilization policies and is an easily controllable way to begin a wider process of opening up the domestic economy to become part of the global economy. (World Bank 1994: 192)

It is submitted that:

- strongly constrained offshore investment is inappropriate, as it concentrates the risk of investment in the local economy, potentially reducing returns as well as increasing risk,
- this is exacerbated if the size of investable funds becomes sufficiently large to introduce distortions to the supply-demand dynamic in local markets, as it has the potential to do over time,
- the issue of whether and how to liberalize existing constraints on offshore investment forms part of a debate that has implications well beyond that of the pension system, though that debate must consider explicitly the impact of its conclusions on pension fund members, and that
- the existing maximum applying to occupational pension funds of 15% offshore, with gradual liberalization anticipated, is broadly appropriate to the mandatory opt-out system as well, subject to review from time to time.

Passive management

Passive investment management refers to the practice of tracking an index that represents a basket of shares, rather than attempting to improve returns by taking short-term decisions on the shares most likely to outperform the index.

The strategy tends to be under-represented in the publicity produced by the asset management industry because it is cheaper and produces lower levels of profit than its counterpart, active investment management. Also, since performance quite closely tracks the index, this strategy does not result in the headline-grabbing returns that tend to find their way into the marketing material of the active managers.

> Fees and charges on assets have a significant impact on terminal accumulations and are thus of special interest to policymakers. We can achieve lower fees and charges through… (d) passive asset allocation strategies where PFMs do not incur the excessive transaction costs of active funds management and instead track a pre-specified index. Passive funds management also enables policymakers, regulators and customers to assess and benchmark the performance of PFMs against the underlying market index. (IIEF 2004: 21)

This quotation is from a discussion of the framework of the proposed Indian mandatory retirement savings system. The proposal is to permit only passive management for all domestic and offshore equity investments.[91] The document leaves open the possibility that, sometime in the future, the regulator may permit some level of active investment management of equities.

The Turner enquiry into the UK pension system (UK Pension Commission, 2005) does not envisage forced investment in passive investment strategies, but recognizes that there is a high potential for this to occur given the proposed charge limit of 0.30% of assets per year. The report expresses concern that high levels of investment in index-linked approaches could theoretically have an impact on the effectiveness of capital markets[92] but through its modelling of the development of the system, comes to the conclusion that it is unlikely to be large enough at any stage to impact adversely the operation of the markets.

A case exists for forcing investment in passive investment strategies, on the basis that the marketplace within which the choice of active or passive is made does not operate effectively. The rationale for such a line of argument is acknowledged, but it is suggested also that the main consequence of the inappropriate promotion of active investment strategies over their passive counterparts is higher charges. Through the establishment of a charge ceiling to the accreditation system, providers will be forced to consider passive investment options for a considerable portion of portfolios or provide access to very cost-effective active asset management.[93]

It is submitted that there is no need to require ARIs to allocate a stipulated proportion of assets to index-linked vehicles.

[91] Active management of government and corporate bonds is to be permitted only where no standard benchmarks for the asset classes exist.

[92] The theory, untested in practice, is that high levels of investment in passive strategies would reduce the pool of players competing in the active investment environment, potentially increasing price volatility and distorting the effectiveness of the market operation.

[93] Discussion at the end of section 4.4 addresses the concern that encouraging too much investment in passive vehicles would damage the operation of the market through increasing price volatility.

5.3 Minimum investment returns

A number of governments provide some form of guarantee to the participants of mandatory retirement systems. Sometimes these are explicit and sometimes implied.

Chile provides a guarantee to all citizens that have contributed to the individual account systems for twenty years or more, which provides a minimum benefit in the event that the mandatory contributions accumulate insufficient to provide an income in line with this minimum.[94] Participants in **Mexico** choose at retirement to take the accrued benefits from the PAYG system or the accumulated fund in the second pillar, whichever pays a better benefit, so the first-pillar system acts as a safety net (Grandolini & Cerda 1998). Support is no more than structural in **Argentina,** where participants must contribute to both the PAYG system and the mandatory counterpart, providing diversification of risks, unlike in Chile where the individual account system is the only pillar to which participants must contribute.

Government guarantees are valuable to system participants, but they are not without risk. They may introduce moral hazard – for example, participants and providers taking less care to safeguard the investments of the pension funds because of the protection offered by the government. In addition to this protection of the government underpin, **Chile** and many other **Latin American countries,** but **not Mexico** (Vittas 1998), require pension funds to meet relative return guarantees.

In Chile, for example, the annualized real yield for each fund:

- must not lag the average for funds of that type[95] by more than a specified number of percentage points, and
- must not fall below half of the corresponding average for funds of that type.

In the event that the yield does fall below either of these thresholds, the administrator of the fund must draw on its own yield fluctuation reserve and then on the obligatory capital reserve. If available funds are still insufficient to meet these minima, then the state makes up the difference and institutes liquidation proceedings against the administrator.

Similar arrangements are present in most Latin American systems, providing real returns above a certain level, benchmarked to peers. The consequences of failing to meet the specified performance benchmarks, together with rather tight limitations on investment classes, have resulted in a herding of investment patterns and tight bunching of performance.

While guarantees expressed in relative terms are the norm in Latin America, participants in other countries are protected by absolute guarantees. **Switzerland** imposes a minimum return on mandatory occupational arrangements of 4% a year,[96] which tends to distort and complicate the asset-management practices of funds. **Singapore** also has a guaranteed nominal return, 2.5% at the time of writing by Vittas (1998).

Problems with investment guarantees

> Investment limits, minimum profitability rules [investment guarantees] and state guarantees raise many controversial issues in pension fund regulation. On the one hand, there is a need to protect workers from imprudent behaviour by asset managers. But on the other hand, such rules tend to give rise to moral hazard, to stifle financial innovation and competition, and to constrain investment efficiency. (Vittas 1998: 22)

Minimum investment-return rules imposed on providers can introduce a number of distortions:

- **Capital cost.** Guarantees are expensive. They require providers to set aside capital to protect themselves against the event of poor investment conditions.[97] Sometimes this forms part of an explicit regulatory rule – for example in Chile, where capital equal to 1% of the value of the assets must be set aside to protect against the event of poor market returns.
- **Herding.** Guarantees encourage conservative investment behaviour. This is not only because of the cost of topping-up returns in a year in which investment performance lags the guarantee level, but because of the consequent damage to market credibility. Constraints on the freedom of asset managers to exercise their best views on investment opportunities reduce the potential for them to deliver high investment returns and may reduce the extent to which participants are able to distinguish 'good' managers from their weaker counterparts.
- **Distorts investment behaviour.** The existence of investment guarantees can adversely impact the investing strategy of providers. At most times, providers will be inclined to err on the conservative side in order to meet the requirements.[98] But towards the end of a measurement period in which performance up to that point lags the guarantee, managers have an incentive to increase the risk that they take to avoid the consequences of missing the hurdle rate. This type of behaviour is seldom in the interest of the fund member.
- **Undermines private-sector provision.** An environment in which the authorities permit private-sector managers to provide services but limit their ability to compete effectively, particularly with the additional support of a government guarantee, undermines the rationale for private-sector provision. This potentially damages the basis on which the private sector is involved in pension provision and can even impact the effective operation of the unconstrained market for voluntary savings.

The argument against investment guarantees is supported by the observation that they usually exist in the thin, unsophisticated markets of reformed Latin American systems. This is not true. While investment guarantees are not common on developed Anglo-Saxon markets, it has been shown already that they play a substantial role in the developed German-speaking

[94] The government also steps in where the provider is liquidated or where application of the income drawdown formula after retirement results in erosion of income to below the level of the minimum.
[95] See section 5.4 for a description of the five classes of funds in Chile.
[96] The figure of 4% is reported by Vittas (1998), but note that the minimum rate of return is modified by the authorities from time to time. It was reduced from 4% to 3.25% in January 2003 and reduced again a year later to 2.25%. In the second half of 2004 the rate was raised to 2.5% (Investment & Pensions Europe, 1 September 2004, www.ipe.com). Similar dynamics exist in the German occupational funds market.
[97] South Africa is familiar with this environment, though participants are not as clear as they should be regarding the cost of these guarantees. The so called 'guaranteed' or 'smoothed bonus' products require the payment of an annual fee (often not disclosed) to shareholders to compensate them for the provision of the guarantee. The structured products that have emerged more recently, underpinned by derivative investment instruments, are opaque, involving significant explicit or implicit cost to meet the cost of the guarantee.
[98] The requirements must be pitched below the expected average, otherwise they would trigger top-up payments more often than not, making it impossible to build up the reserve fund which feeds these occasional top-ups.

countries of central Europe. Furthermore, while Latin American regulators have shown a willingness to liberalize constraints in many respects, for example, by de-regulating asset allocation limitations, they have not removed the requirement that providers meet investment guarantees: Chile provides the outstanding example.

Concluding comments

All things considered, the disadvantages of investment guarantees outweigh the benefits. The cost of guarantees can be high – and providers are likely to take a conservative approach to this costing – and the potential for market distortions and inappropriate investment behaviour significant. The existence of product classes and asset limitations separately for each of these classes (see section 5.4), together with very strict disclosure requirements, provides sufficient protection for system participants without risking the distortions that can have a meaningful downward impact on investment performance.

Within the asset-allocation constraints set for each of the available fund types, providers may seek to differentiate themselves on the basis of the investment strategy adopted. This is acceptable as long as they do not make spurious claims like suggesting that more aggressive strategies produce higher return, without pointing out that they expose members to higher risks at the same time. The importance of sound disclosure requirements cannot be overstated.

5.4 Investment choice

> … choice is important in retirement-income provision because people differ in their characteristics and their preferences, and both of these changes over the life-course. Flexibility and choice allow people to adjust retirement savings to match their age, expected career earnings path, expected retirement age and their attitudes to risk. … But there are also important counter-arguments to portfolio choice: principally, the cost and complexity. Dividing individual pension contributions between different funds (even when they are offered by the same manager) and transferring investments between funds on members' request can add significantly to the administrative burden. Providing information on different investment options and educating workers about investment choice might also be costly. There is also the risk that workers make the "wrong" choices. (OECD Social Policy Division 2006: 2 & 3)

Should workers be permitted to spread their accumulated retirement assets across a number of different funds? If they are, can they allocate across different fund managers?

Flexibility and cost are almost inextricably linked. It is difficult to think of an environment in which improved levels of choice do not lead, ultimately, to higher system charges. But charges should not be the only guide of how much choice to offer participants. The benefits of the choice – for example, higher investment returns through investing in more appropriate assets – could outweigh these costs if the range of choices is carefully managed in the system design.

This subject is linked to many others discussed in this paper but raises a few additional considerations that are discussed below.

Multiple funds: limited choice

The Chilean authorities initially decided not to permit workers to invest contributions in more than one fund. Among the most controversial of the investment limitations imposed on members in the initial years of the system was that each worker could have only one account and each management company only one fund. This restriction was imposed to simplify the workers' choice of pension fund manager and the corresponding choice to switch to another (World Bank 1994: 220). This approach not only reduces complexity, it also simplifies compliance monitoring.

However, it introduces a number of disadvantages as well.

> Allowing workers to have accounts with more than one company would let them hedge their bets and reduce their dependence on the performance of a single company. And allowing management companies to operate a wider range of funds would let them develop expertise in market niches and tailor products to different tastes and age groups. … The one-account, one-fund rule reduces variety, choice, and diversification – three potential advantages of a decentralized system. (World Bank 1994: 220)

Consistent with gradual deregulation in a number of areas, Chile has modified its original position and now permits multiple accounts within constraints. Initially each administrator was permitted to make available only one other fund and entry to this fund was limited to members in receipt of pension or with 10 years or less to go to the legal age of retirement.

Significant change was introduced in August 2002. Each administrator now makes available five different funds, labelled A to E, which have different sets of investment limitations to ensure that they have investing characteristics suitable to their purpose (see Table 2). Funds B to E must be established by every administrator, which may choose whether to make available Fund A as well.

Table 5.
Chile: maximum and minimum limits in equities, per fund.

	Maximum	Minimum
Fund A	80%	40%
Fund B	60%	25%
Fund C	40%	15%
Fund D	20%	5%
Fund E	0%	0%

Source: SPFA (2003:176)

The Chilean regulator (SPFA, 2003) lists a number of advantages of the so-called *multifund* approach:

- **Expected value of pension.** Investment in assets with a risk-yield combination consistent with the planning horizon of the individual saver permits an increase in the overall expected value of the pension.
- **Preferences and needs.** The system allows members to invest in a way that is more consistent with personal preference or financial circumstances.
- **Incentives to seek information.** The improved motivation to members to obtain details on the performance of funds should impose greater discipline on the administrators.
- **Improvement in service.** More funds leads to more personalized service from administrators to members.
- **Member participation.** Members feel more involved in their pension saving because they have the opportunity to select their funds.
- **Better allocation of resources.** Higher investment specialization should lead to increased levels of efficiency regarding how resources are allocated to the economy.

The choice of funds is constrained:

- Pensioners may choose only from one of the three least risky funds, funds C, D or E.
- Older members may add to this fund B, but not invest contributions or fund balances into fund A.
- Default fund assignments are made according to age, B forming the default for members up to age 35, C from that age to 10 years before retirement and D thereafter.

The system is not perfect.[99] But it represents a significant improvement to the one-fund approach that preceded it. There are other examples of similar systems. In Estonia, Latvia and Slovakia, pension fund administrators offer three investment alternatives. Again, regulations specify the maximum exposure to equities in each of the alternatives, though the limits applied vary considerably from country to country (Tapia & Yermo 2006).[100] Mexico and Peru have recently introduced investment choice in their mandatory individual-account system. All providers in Mexico, for example, must make two funds available to their participants.

Multiple funds: unlimited choice

Chile provides an example of a paternalistic environment with gradual liberalization of constraints. At the other extreme are countries that do not limit the investment of mandatory retirement savings in any way.

Sweden offers a very wide choice of funds to participants. Starting out with over 450 funds, by the end of 2005 some 725 funds were available for investment of mandatory contributions (SSIA 2006). Individuals may invest in a maximum of five funds and switching frequency is unrestricted (Tapia & Yermo 2006).

Participants in Australia also face a large array of investment funds. According to the June 2005 statistics of the Australian Prudential Regulation Authority, 597 entities in Australia offer investment choice (Tapia & Yermo 2006), with many retail funds offering more than 60 options. This is similar in many ways to its voluntary counterpart in the United States, the so-called 401(k) system, under which investment choice is virtually unrestricted but participation rates are not particularly high (Munnell et al. 2002, 2005).

The proportions of members actually exercising a choice is low, both in the systems offering very wide choice, such as Sweden, and in those with limited options, as in Chile. This makes the policy decision on the default fund extremely important.[101] Systems that offer extremely wide choice thus introduce cost that may not benefit all participants. Economies of scale are much lower, regulation can be more expensive and the potential for inappropriate provider behaviour may be greater in an environment in which there is 'more room to hide', though any success is likely to attract attention.

Research also shows that the wider the range of options, the more difficult it is to make a choice, the lower the confidence of the participant in the choice made and the greater the probability that no choice will be made at all (UK Pension Commission 2005; Iyengar et al. 2003).

The Turner Commission in the United Kingdom (UK Pension Commission 2005) shares the view that unlimited investment choice is inappropriate in a mandatory system, or even the quasi-mandatory auto-enrol system recommended by that study. Referring to the Swedish system, the Commission states,

> It is not the best way to minimize costs. While fund management charges are not the most important consideration in cost control… their minimisation via economy of scale purchase can still make a significant difference to the Annual Management Charge. (UK Pension Commission 2005: 373)

The Commission recommends that the central fund, the National Pension Savings Scheme, negotiates fund mandates at very low fees covering a limited number of funds – it suggests six to ten – in the expectation of high volumes. It leaves open the possibility that other funds might be made available at non-negotiated fees, creating some choice and addressing the potential for criticism to be levelled at the range of funds available in the negotiated pool, perhaps not addressing the narrow needs of specific interest groups.

Switching

The flexibility for members to switch between providers is considered in section 4.2, but not in the context of multiple funds. The main danger of a liberal set of switching rules is that it stimulates providers to inappropriately expensive practices to attract members from their competitors, potentially introducing substantial cost into the system. The secondary danger of switching between the portfolios of a provider – this might be referred to as internal switching – is more about the inefficiency of the pursuit of short-term returns than about the introduction of systemic market cost.

[99] Modelling shows that the very conservative limits applying to Fund E are sub-optimal and that a small level of equity investment would represent an improvement except in cases where immunity to annuity risk is needed.

[100] In the most aggressive fund, the maximum investment in equities is 30% in Latvia, 50% in Estonia and 80% in Slovakia. A number of reasons for these differences are possible, for example the regulators' attitudes to risk and the depth and volatility of the local equity markets, but possibly also a desire to establish demand for government-issued debt.

[101] The default in the Swedish system is given by the most recent choice of fund (Settergren 2001), not necessarily the best for the member at the time.

Evidence from other countries suggest that this internal switching is relatively infrequent (Tapia & Yermo 2006), suggesting that there should not be a great need for regulatory intervention. Regulators themselves take a wide variety of approaches to the issue (Rozinka & Tapia 2005), some imposing no limits (for example, Mexico) and some setting a limit to the frequency of switches (Estonia, once a year, Chile twice and Peru four times). Some permit trustees some discretion to set limits (Australia, Hungary and Italy) and others have no limits at all (Mexico and the Slovak Republic).

It is suggested that it would be inappropriate for the authorities to allow unlimited internal switching in a mandatory saving environment. The evidence suggests that market-timing is generally not profitable and that frequent short-term switching is not needed in the context of a pension saving environment in which changes to needs should be largely anticipated by participants. It is recommended that internal switches be permitted no more frequently than once a year.

Default funds

Any system design needs to cater for default allocation, the steps taken when members fail to exercise a choice. This is particularly important in an environment of multiple funds.

The most logical choice would appear to be that followed by Chile, in which the range of funds is limited to five and the default is based on the term to retirement. The younger the member, the greater the investment risk of the default fund, on the basis that this provides the optimal expected risk-return combination. The approach is not perfect and has been questioned by some, but it is simple to apply, broadly appropriate to the needs of most participants and hard to improve on in a way that gives a better outcome to all members.

Application to South Africa

Limited choice or none at all is usually justified on the basis of poorly developed capital markets or a member profile ill-equipped to exercise effective choices. The South African investment environment and capital markets have the sophistication to manage at least a low level of choice.

However, an unlimited range of investments like those available to savers in the mandatory systems of Australia and Sweden or the voluntary counterpart in the United States is not advocated. Greater care needs to be taken to ensure that the assets in these systems are properly protected from uninformed choices, even poor or biased advice. The burden on the authorities to support such a complex environment with appropriate levels of consumer education and on the supervisor to contain the development of innovative alternatives not designed in the best interests of the customer is considered too great for a system like this at its launch.

So a limited range of investment options is regarded as appropriate at launch. Expansion of the set of investment choices could be considered thereafter. Liberalization of the system may be in the best interests of participants as their knowledge increases and economies of scale permit greater variety of more effective competition. Perhaps the key question is whether the South African saver has the wherewithal to invest sensibly in such a system.[102]

The recently introduced multi-fund approach in Chile is supported. It is recommended that ARIs, including the public-sector provider, be required to make available five funds distinguishable according to the inherent risk in each strategy. Narrower bands than those permitted in Chile are recommended, establishing more soundly the investment characteristics of each of the funds. These bands are indicated in the table below. The view that Chile's Fund E is too conservative, sub-optimal against the alternative that permits a small proportion of equity investment, is supported.

Table 6. Recommended maximum and minimum limits in equities, per fund.

	Maximum	Minimum
Fund A	80%	50%
Fund B	60%	35%
Fund C	45%	25%
Fund D	30%	10%
Fund E	15%	0%

Source: Author's recommendation

Limitations on other asset classes should be considered with care. A minimum investment in any asset class has the potential to introduce distortions, but some way should be found to encourage or force investment in asset classes that retain their capital values in real terms, such as inflation-linked bonds, for at least one of the more conservative funds. More sophisticated limitations, such as those involving a value at risk, may be considered as well, as is the case in Mexico.

A minimum investment allocation to any classes of investment is not supported, government bonds, black economic empowerment and socially responsible investment included. However, initiatives are currently in place or being discussed that put various forms of incentives in place to invest in ventures that are in the public interest, so-called socially responsible investments. These initiatives should be continued, allowing trustees to evaluate the alternatives in the best interests of their participants.

Asset limitations that control risk and address conflicts of interest are supported. Examples of these are restrictions on the level of investment in:

- risky asset classes, such as unlisted equities or derivative instruments,
- single assets, such as debt issued by a single issuer,
- the parent company of the ARI or a member of the group to which the ARI belongs.

Drafting of the principles behind the limitations is recommended, to aid the regulatory authority, which almost invariably finds itself

[102] An alternative to the policy alternatives of one-fund-only and limited multiple funds is the possibility of applying the one-fund restriction to either the accumulated fund or the current contributions but not both. This approach appears attractive because it constrains the possibility for members to damage their retirement prospects through poor choices, but it produces results that are seldom optimal. It is very rare that investing the accumulated fund in one way and incoming contributions in another is the best way to optimize the risk-return problem.

approached by those involved in product development to obtain some indication of the appropriateness of a proposed investment strategy, usually innovative in nature and often running close to the investment limitations.[103] The principles may also cover more complex aspects of investment restrictions, potentially introducing risk-based supervision like value-at-risk limitations.[104]

Since it is difficult to prevent these types of approaches, the author recommends supporting the process with the appointment of an individual or department responsible for approving and monitoring the investment strategies of the ARIs. As for all other aspects of the management of these firms, regular information provision to the regulatory authority would be mandatory and sanctions would be imposed in the event of non-compliance.

Offshore investment limitations consistent with those established as part of a coherent national approach to exchange rate and capital markets risk are supported. The author urges that this policy takes properly into account the interests of the members of the mandatory defined contribution system and institutes modifications that are applicable to this environment, where such modifications may be appropriate, but recommends that some protection against the possibility of political manipulation is instituted prior to the launch of the system.

6. CONCLUDING COMMENTS

Defining the structure of a national old age system is extremely complex.

- A range of objectives must be identified and prioritized.
- Design alternatives must be considered with an objective determination of the extent to which each of these might meet the objectives.
- The financial implications of the alternatives must be assessed with care across a range of unknowns, two or three generations into the future, taking into account as far as possible the broader economic impacts of each of the alternatives.
- Second- and third-order implications must be considered, influences on the operation of labour markets, for example, and the cost of doing business.
- Optimal regulatory and operational systems must be designed and implemented.
- Communication to citizens must be planned and executed in a way that maximizes confidence in the system and in all of the entities that form part of it.

This paper forms a contribution to this definition, but only a small one. It considers how private-sector providers, a crucial cog in the retirement provision engine, might be brought into the system in a manner that aligns their interests with those of the customers that they serve.

Because private-sector provision is only an element of the broader system, the paper touches on a number of issues that require fuller treatment elsewhere. The design of death and disability benefits is an example of one of these issues. It is identified in this paper as affecting the parameters of private-sector provision but it is a subject too complex for full treatment within the scope of this paper. It is hoped that the discussion stimulated by this document proves fruitful for the further development of this very important subject.

The author and sponsor of this paper welcome full and frank criticism of its content in the interests of all South Africans.

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[103] Some derivative strategies are protective, reducing overall risk or exposure to asset classes, while others are aggressive, employing leverage in an effort to improve returns but increasing risk at the same time. The former may be appropriate, the latter not. If the rules merely state that the allocation to derivatives must be limited, appropriate strategies employing derivatives just above the limit would be barred and inappropriate alternatives employing derivates just below the limit would be allowed. The principles behind the rules, while introducing some complexity, would assist the regulator and providers to determine what types of approaches are appropriate to fund participants, removing the potential for compliant but dangerous practices.

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Appendix

APPENDIX 1 GOVERNANCE PRINCIPLES

> Pension plan governance is about delivering on the pension promise consistent with the pension plan documents and pension legislation. (CAPSA 2004: 3)

Around the world, supervisors and industry participants are developing a growing awareness of the importance of sound governance structures in pension systems, particularly as private pension provision grows in significance. This section summarizes two sets of governance principles, one from a multi-country organization, and one from an umbrella body of provincial supervisors.

The Organisation for Economic Co-operation and Development (OECD) has a research and policy unit, focusing on private pensions, that has put significant effort into understanding what constitutes effective governance of private-sector pension arrangements, culminating in a set of governance principles (OECD, 2005).

The Canadian Association of Pension Supervisory Authorities (CAPSA) has also put substantial effort into developing a set of principles that could be used by regulators and industry players to establish a sound structure of governance. CAPSA put out a discussion document in 2001 with thirteen principles (CAPSA, 2001) and a subsequent set of guidelines that summarized these into eleven (CAPSA, 2004). The summary below lays emphasis on the second of these, drawing where relevant on some of the material of the first.

In both cases, space does not permit the reproduction of the original documents. What follows is a paraphrased summary of each.

OECD principles of governance

> The Council… recommends that Member Countries invite public authorities and pension entities to ensure an adequate and efficient governance framework for pension funds, having regard to the contents of the Annex to this Recommendation of which it forms an integral part; invites Member Countries to disseminate these guidelines among pension funds; [and] invites non Member economies to disseminate these guidelines among pension funds. (OECD 2005: 6)

South Africa has recently been granted observer status of the pensions unit of the OECD, increasing the seriousness with which it should take the OECD governance guidelines. These guidelines are summarized as follows (excerpts quoted in italics; comments in standard text):

Governance structure: *The governance structure should ensure an appropriate division of operational and oversight responsibilities, and the accountability and suitability of those with such responsibilities.*

1. **Identification of responsibilities.** *There should be a clear identification and assignment of operational and oversight responsibilities in the governance of a pension fund.* The notes supporting the governance principles suggest that the primary objectives, the operational functions and the roles of all parties to the fund should be clearly documented. This goes almost without saying and should be the cornerstone of every fiduciary organization.
2. **Governing body.** *Every pension fund should have a governing body vested with the power to administer the pension fund and who is ultimately responsible for ensuring the adherence to the terms of the arrangement and the protection of the best interest of plan members and beneficiaries. The responsibilities of the governing body should be consistent with the overriding objective of a pension fund which is to serve as a secure source of retirement income. The governing body should not be able to completely absolve itself of its responsibilities by delegating certain functions to external service providers.* The governing body, most often a Board of Trustees in the South African legislative framework, should in fact not be able to absolve itself of any of its responsibility through outsourcing, bearing in mind its primary responsibility to the members of the fund.
3. **Expert advice.** *Where it lacks sufficient expertise to make fully informed decisions and fulfill its responsibilities the governing body could be required by the regulator to seek expert advice or appoint professionals to carry out certain functions.* While the governing body may not delegate responsibility and accountability, it must seek professional advice where it does not have the skills to carry out its responsibilities with competence.
4. **Auditor.** *An auditor, independent of the pension entity, the governing body, and the plan sponsor, should be appointed by the appropriate body or authority to carry out a periodic audit consistent with the needs of the arrangement.* The guidance goes on to suggest that the auditor has whistle-blowing responsibility, reporting facts that may have an adverse impact on the position of the fund first to the governing body and, if that body does not take appropriate actions, to the supervisor.
5. **Actuary.** *An actuary should be appointed by the governing body for all defined benefit plans financed via pension funds.* The actuary is also required to fulfill a whistle-blowing responsibility. The guidance is silent on whether actuaries should be required to assess defined contribution arrangements, suggesting that this is not a requirement. Concerns are expressed that requiring actuaries to assess such arrangements might add to the regulatory burden of these funds, but the author would be more supportive of such intervention in the case of the much larger entities mooted under the mandatory contributions environment. It is recommended that the governing body applies its mind to the question of actuarial oversight of the fund, bearing in mind its responsibility to its members so safeguard their financial interests.

6. **Custodian.** *Custody of the pension fund assets may be carried out by the pension entity, the financial institution that manages the pension fund, or by an independent custodian. If an independent custodian is appointed by the governing body to hold the pension fund assets and to ensure their safekeeping, the pension fund assets should be legally separated from those of the custodian. The custodian should not be able to absolve itself of its responsibility by entrusting to a third party all or some of the assets in its safekeeping.* A different view to that of the OECD suggests that custody should always be independent of the pension entity.[105] It is recommended that the pension fund assets should be legally separated from those of the custodian and that the custodian may not entrust assets to a third party. The OECD goes on to suggest that the custodian may also fulfill an external whistle-blowing function. This view is supported.

7. **Accountability.** *The governing body should be accountable to the pension plan members and beneficiaries and the competent authorities. The governing body may also be accountable to the plan sponsor to an extent commensurate with its responsibility as benefit provider. In order to guarantee the accountability of the governing body, it should be legally liable for its actions.*[106] The principle that the governing body be accountable to the members and authorities is completely supported.

8. **Suitability.** *The governing body should be subject to minimum suitability standards in order to ensure a high level of integrity and professionalism in the administration of the pension fund.* This principle is supported, consistent with well-established prudent-person principles.

Governance Mechanisms: *Pension funds should have appropriate control, communication, and incentive mechanisms that encourage good decision making, proper and timely execution, transparency, and regular review and assessment.* The four principles that follow are concerned more with implementation of principles than with its structure. These are supported in their entirety but it is noted that there are many ways to implement these principles and that participants should be striving to demonstrate that their approach is sound, perhaps better than the corresponding approach used by others. The OECD adds significantly to the framework through practical suggestions on implementation. The discussion in section 3.1 of this paper refers extensively to these proposals.

9. **Internal controls.** *There should be appropriate controls in place to ensure that all persons and entities with operational and oversight responsibilities act in accordance with the objectives set out in the pension entity's by-laws, statutes, contract, or trust instrument, or in documents associated with any of these, and that they comply with the law. Such controls should cover all basic organizational and administrative procedures; depending upon the scale and complexity of the plan, these controls will include performance assessment, compensation mechanisms, information systems and processes, and risk management procedures.*

10. **Reporting.** *Reporting channels between all the persons and entities involved in the administration of the pension fund should be established in order to ensure the effective and timely transmission of relevant and accurate information.*

11. **Disclosure.** *The governing body should disclose relevant information to all parties involved (notably pension plan members and beneficiaries, supervisory authorities, etc.) in a clear, accurate, and timely fashion.*

12. **Redress.** *Pension plan members and beneficiaries should be granted access to statutory redress mechanisms through at least the regulatory/supervisory authority or the courts that assure prompt redress.*

Very careful consideration should be given to the more detailed suggestions of the OECD provided in support of the four recommended governance mechanisms. These suggestions are quoted in full below (OECD 2005: 16 & 17, emphasis added for clarity):

Mechanisms are needed to **assess regularly** the performance of the pension entity's internal staff as well as the external service providers (e.g. those providing consultancy, actuarial analysis, asset management, and other services for the pension entity). It is also good practice for the governing body to undertake self-analysis and for an independent, external person/organisations to undertake a review of the internal controls of the pension entity. Where the governing body consists of an executive and a supervisory board the latter may be assigned with the task of assessing the performance of the executive board.

Objective performance measures should be established for all the persons and entities involved in the administration of the pension fund. For example, appropriate benchmarks should be established for external asset managers. Performance should be regularly evaluated against the performance measures and results should be reported to the relevant decision maker, and, where appropriate, to the supervisory authority, and the pension fund members. The benchmarks should be reviewed regularly also to ensure their consistency with the pension fund objectives (e.g. the investment strategy).

Appropriate compensation can provide the right incentives for good performance. The establishment of a compensation committee and chairperson may optimise the process of evaluating the compensation of those responsible for the operation and oversight of the pension fund, such as asset managers, custodians, actuaries, as well as the members of the governing body.

The compensation policy of sales forces of pension plan providers may also warrant close scrutiny by the governing body, since these costs can reduce pension benefits significantly. There is a risk also that sales staff may not act in the best interest of plan members, offering products that are not suitable for certain individuals. The governing body should therefore ensure that the remuneration structure for sales staff does not create distorted incentives or and lead to ill-advised decisions by consumers.

[105] The OECD alludes to this: "The appointment of an independent custodian is an effective way to safeguard the physical and legal integrity of the assets of a pension fund" (OECD 2005: 14, principle 6).

[106] The OECD goes on to suggest that the accountability of the governing body has a number of practical implications, including "… transparent selection mechanisms for the members of the governing body (including the possibility of appointments of representatives of plan members and beneficiaries through a fair selection system)…" (OECD 2005: 14).

Conflicts of interest situations should be identified and dealt with in a suitable manner. In certain cases, banning the concentration of functions in a single person or entity that would otherwise lead to a conflict of interests may be the preferred solution. In other cases, disclosure of the conflict of interest to the governing body may suffice, who should be required to monitor these cases closely.

Where the conflict involves a member of the governing body, the case should be reviewed and monitored by the members of it not conflicted. Where appropriate, the governing body may seek independent advice or guidance regarding the service or transaction. In the event of the governing body not being able to resolve a conflict of interest situation that may be judged by some of the members of the governing body as harmful to the interest of the plan members and beneficiaries, this should be reported to the supervisory authority, which will make a decision on whether they should be permitted, and if so under what conditions.

The governing body should also establish appropriate controls to prevent the improper use of **privileged or confidential information**. A code of conduct may be established, requiring employees to observe high standards of integrity, honesty, and fair dealing. Internal review mechanisms may be put in place to verify and sanction the compliance with the code of conduct.

An adequate **risk measurement/management system** and an effective internal audit should be also established. The risk management system should cover both investment and biometric risks. These control mechanisms form the basis of good business conduct, enhanced transparency, consistency as to management decisions, and for the protection of all stakeholders of the pension fund.

Finally, pension entities should have mechanisms to **assess the compliance with the law**. A compliance officer may be assigned to carry out this activity on a regular basis.

CAPSA governance guidelines

The notes below provide in italics the full content of the guidelines and in standard text some of the supporting material from CAPSA and additional comments. Supporting material from the corresponding Canadian discussion document (CAPSA 2001) is also referred to.

1 **Fiduciary responsibility.** *The plan administrator has fiduciary and other responsibilities to plan members and beneficiaries. The plan administrator may also have fiduciary and other responsibilities to other stakeholders.* The 'plan administrator' is, in Canadian parlance, the body responsible for the governance of the pension plan, the equivalent of the 'governance body' in OECD nomenclature. Principle 3 of the equivalent draft governance guideline (CAPSA 2001) makes it clear that the trustee body must fulfill its fiduciary responsibility to members and beneficiaries and "… *has a duty to act in good faith and in the best interests of the plan members and beneficiaries of the pension plan."*[107]

2. **Governance objectives.** *The plan administrator should establish governance objectives for the oversight, management, and administration of the plan.* Objectives should be written down and agreed by all parties to the fund at its establishing, marking down the framework for implementation to follow. They should also be made available to plan members and beneficiaries (CAPSA 2001).

3. **Roles and responsibilities.** *The plan administrator should clearly describe and document the roles, responsibilities, and accountability of all participants in the pension plan governance process.* This echoes the OECD call for clear roles and the need for explicit documentation. CAPSA (2001) adds that there should be a procedure for the selection and succession planning of the members of the governing body and the senior management of the pension plan.

4. **Performance measures.** *The plan administrator should provide for the establishment of performance measures and for monitoring the performance of participants who have decision-making authority in the governance process.* As trustees have responsibility that can affect the members of the fund in far-reaching ways, their performance should be assessed against an objective set of standards.

5. **Knowledge and skills.** *The plan administrator, directly or with delegates, has a duty to apply the knowledge and skills needed to meet governance responsibilities.* This is complemented by the OECD suggestion that the entity referred to here as the plan administrator has an explicit responsibility to seek professional assistance where its skill set is lacking in any way. CAPSA (2001) adds that members of this group should be provided with appropriate training and undertake ongoing education.

6. **Access to information.** *The plan administrator and, as necessary, any delegates should have access to relevant, timely and accurate information.* The information should also be timely, unbiased and received directly from the originating source, even if it requires supporting documentation from advisers.

7. **Risk management.** *The plan administrator should provide for the establishment of an internal control framework, commensurate with the plan's circumstance, which addresses the pension plan's risks.* This means that the trustees of a plan must carry out an assessment of the risks to which the pension fund is exposed and take steps to mitigate against these risks.

8. **Oversight and compliance.** *The plan administrator should provide for the establishment of appropriate mechanisms to oversee and ensure compliance with the legislative requirements and pension plan documents and administrative policies.* How this is achieved is usually up to the company in question, an example of governance execution in practice.

9. **Transparency and accountability.** *The plan administrator should provide for the communication of the governance*

[107] The Canadian draft document also makes it clear that, when employers or bargaining agents also assume duties of trust as part of the governing body, they must "… use discretion in a fair and impartial manner, and put the interests of plan members and beneficiaries above their own. Instances where conflicts may occur include the establishment of an investment policy, the payment by the sponsor of expenses directly out of the pension fund, ownership of surplus, plan mergers and conversions, and funding policy."

process to plan members, beneficiaries and other stakeholders to facilitate transparency and accountability. This should be a documented plan.

10. **Code of conduct and conflict of interest.** *The plan administrator should provide for the establishment of a code of conduct and a policy to address conflicts of interest.* This is another example of practical implementation of governance principles.[108]

11. **Governance review.** *The plan administrator should conduct a regular review of its plan governance.* The way in which governance structures are implemented in practice needs to be reviewed from time to time in response to changes to guidelines or market structure and practice. Governance standards cannot be considered a set of static benchmarks that never change. CAPSA (2001) suggests that the policy should be reviewed to ensure that the objectives of the policy plan are effectively pursued, adding, *"… best practice for self-assessment reporting would require the governing body to periodically report to pension plan members, beneficiaries, employer(s) and bargaining agent(s)."*

Good governance is not easy. Sound principles provide a foundation, but governance in practice involves a constant assessment of the effectiveness of the manner in which these principles find their practical implementation.

> Good pension plan governance is essential for meeting fiduciary and other obligations; minimizes risks and maximizes efficiency; promotes accurate, timely and cost-effective delivery of pension benefits; promotes consistent administration of the plan in the best interests of plan members and beneficiaries; requires control mechanisms that encourage good decision-making, proper and efficient practices, clear accountability, and regular review and evaluation; and contributes to positive pension plan performance and demonstrates due diligence on the part of the plan administrator. (CAPSA 2004: 3; formatting modified for clarity)

APPENDIX 2 CONTRIBUTION COLLECTION

> Collection, record-keeping and transferring contributions to individual accounts has often proved problematic in practice. Indeed, some reforms have been delayed or abandoned because of collection problems. (OECD Social Policy Division 2006b)

This appendix discusses the advantages and disadvantages of various models for collecting premiums. Readers are reminded that the context for this discussion falls within a broader proposal that the retirement system in South Africa include the following elements:

- a pay-as-you-go defined benefit system with mandatory contributions and redistributive objectives, including the existing social grant safety-net system, managed from the GSRF;
- a funded defined contribution system with mandatory contributions defaulting to the GSRF, but with the option for participants to opt out of the default in favour of an accredited private-sector fund of their choice; and,
- a voluntary supplementary system, most likely defined contribution, under which contributions can be directed to accredited providers or to providers falling outside of the accreditation system.

Many of the arguments set out in this discussion are valid under variations to this mix – for example, a mandatory defined contribution system with centralized management and a private-sector opt-out, or without the involvement of a public-sector alternative to private-sector providers.

> Under a centralised system, a public agency is responsible for collecting contributions and distributing them to different agencies or funds. To do this accurately, the agency needs to identify each individual worker and the amount contributed. In a decentralised system, collection is the responsibility of each agency or pension fund, eliminating the intermediate 'clearing house'. In practice, there is a spectrum of options between these polar extremes. (Demarco & Rofman 1999: 11)

A key issue to be considered is how to collect the contributions paid into the second part, the mandatory defined contribution pillar. World Bank (2005) points out that there are two elements to this process, either of which can be centralized or decentralized, the gathering of data and the gathering of finances. Some form of centralized data collection and management is probably unavoidable, at the very least to ensure compliance with the injunction that contributions are compulsory. Whether financial flows should be centralized is a different matter entirely. That is the subject of this discussion.

Is there any need for discussion?

To some extent, the issue is not controversial. Contributions to an anticipated PAYG system must be collected centrally. It makes complete sense, then, for the same entity to collect the contributions that form part of the funded system and direct them to the providers selected by the members.

Reality is not quite as clear-cut as this.

- First, if the private sector is the more efficient collecting agency, why not have members send all of their contributions to the provider of their choice (defaulting to the public-sector fund), leaving the provider to send on to the GSRF the pay-as-you-go element?
- Second, even if contributions are collected centrally, the question of whether they send individual contributions to private-sector providers or bulk the contributions due to a provider is important.[109]
- Third, we do not have certainty on the broader design issues, as set out in the introduction to this discussion.

[108] The Canadian draft principles address conflicts of interest as follows: "The conflict of interest policy should set out a procedure for the disclosure of conflicts of interest to identified decision makers in the governance process and to beneficiaries where appropriate. The policy should guard against both actual conflicts and the appearance of conflicts of interest. There should be mechanisms in place to ensure that differences between the various interests represented on the governing body are appropriately resolved. A due process should allow governing body members unencumbered access to senior management and external advisors" (CAPSA 2001: 8).

[109] In reality, the collecting agency would wire the money in bulk anyway; the issue is whether the provider knows whose money it is and accounts for it on an individual basis or not.

So the real issues are whether contribution collection should be centralized or decentralized and whether providers will have member identification along with the money that they manage.

It is noted, in acknowledgement of the point made at the end of the earlier quotation that, at the level of detail, other options could be considered. These variations are outside of the scope of this discussion.[110]

Assessing the options

This section starts with discussion of the issue of whether contributions should be collected through a public-sector entity or through private-sector providers. Demarco and Rofman (1999) suggest that the issue is clear in a PAYG system, but point out that the method of collecting contributions for other welfare systems should come into consideration as well.

> If these programmes are also centrally managed, but by a separate institution from the pension system, and also financed through payroll taxes, then either a centralised or decentralised option might be appropriate. A single agency could collect contributions and then distribute the revenue among the different agencies, or the contributions for each programme could be collected by each responsible institution. The choice should be based on efficiency, security and cost. (Demarco & Rofman 1999: 11)

They go on to suggest that the following factors should come into the reckoning of the policymaker:

1. **Economies of scale.** The opportunity for economies is high either where more than one system is dependent on revenues from taxes, or if the bases for personal income tax and social security contributions are similar. In both instances, more than one state agency is using a single collection system.
2. **Efficiency of existing collection agencies.** Weak collection systems may signal the need to establish a new collection system. The establishment of a new vehicle often brings with it the opportunity to utilize up-to-date technology. A number of countries, when designing their systems, took the view that existing systems were not up to the task and chose to delegate the premium collection process to private-sector providers.
3. **Timing and speed of transfers.** One of the features of a funded pension system, usually unique among social structures, is that contributions are paid monthly and should be credited quickly to member accounts. This suggests collection by the private sector, shortening the chain of communication.[111]
4. **Control mechanisms.** A centralized system needs careful design, but a private-sector system requires greater attention to the regulatory framework and supervisory interventions, such as regular reporting.
5. **Cross controls.** A centralized system provides the opportunity for various public-sector entities to work in co-operation with one another to increase rate of compliance. There are a number of potential problems with this, among them technical difficulties, data-privacy issues and the possibility of lower overall compliance.[112]
6. **Incentives.** A decentralized system has better incentives to collect the contributions, since this affects its profitability. The corresponding incentives to design and operate an efficient system in the public sector may not be as effective as the simple profit motive.
7. **Enforcement power.** Enforcement is generally better in the public sector. Efforts to require private-sector entities to report evasion are not without precedent but almost certainly have a lower success rate.
8. **Cost of the collecting scheme.** This issue does not present an easy answer. A decentralized system ought to be cheaper though its scale and the absence of risk and profit margins, but competitive dynamics in the private sector have the potential to drive costs lower. Also, social security institutions carry out a range of activities and some suggest that it is better for them to stick to one task rather than diversify into a number.[113]
9. **Financing collection.** For those who suggest that system participants should finance the collection of contributions, the decentralized approach automatically manages this while the centralized alternative can do so in theory, but with difficulty where it collects contributions for more than one agency.
10. **Corruption.** Centralization has a strong potential to reduce corruption because information is shared by a number of different organizations, multiple public-sector entities, for example, or alternatively the collection agency and the private-sector providers to which it redirects contributions on behalf of participants.

For a particular country, this complex set of trade-offs is not easy to assess. Policymakers should make a candid, careful assessment of existing systems and structures as well as seeking to understand the costs and efficiencies of the private-sector alternatives.

Analysis by FIAP (2006) of the collection costs under a number of Latin American systems demonstrates how difficult this assessment can be. The authors note that the costs reported – this is probably the key word – under the decentralized collection models are lower than under their centralized counterparts. They go on to explain this discrepancy as follows:

> … part of the potential advantages of the centralized systems lie in the lower costs for the employers and in the lower costs of crediting individual accounts assumed by the Fund Managers, which processes are not included in cost measurement as they do not fit into the definition of "collection" adopted for this study. Furthermore, centralized systems could lead to lower additional collection costs of the combined social security contributions. (FIAP 2006: 2)

[110] Details of implementation are also not considered in depth in this discussion. Refer to Demarco and Rofman (1999) for more information.

[111] Timing is definitely a problem in the Swedish clearing-house system. Contributions are collected for both the public and private parts of the system at the same time (Settergren 2001) but contributions may be credited to individual accounts only 18 months, on average, after they are received, primarily because of the need to reconcile employer reports with individual income-tax filings (Sundén 2004).

[112] If tax compliance is generally lower than the corresponding level of compliance to a pension system (in which compliance brings with it a clear benefit), linking the systems together might bring compliance in the pension system down to the level of the pension system.

[113] Studies of the US tax system show how badly it administers the earned income-tax credit, routinely overpaying. The suggestion is that an entity primarily responsible for collection is not particularly good at managing outflows. Refer to General Accounting Office (1994) and Whitehouse (1996, 1997) for more information.

The final part of this quotation is a reminder that consideration of the options must include the potential for economies of scale available from combining systems. With this in mind, a cursory assessment suggests that it would be difficult to establish a private-sector collection system that is more efficient than its public-sector alternative, given that

- the PAYG contributions surely require collection by a public entity, and that
- contributions to the funded system default to a public-sector administration and investment entity.

If a PAYG system is not launched together with its mandatory individual account counterpart, then the argument for private-sector contribution collection is stronger, particularly in light of the recommendation – see the discussion that follows – that accredited entities be held responsible for servicing their clients.

This demonstrates the complex interaction of philosophical and design issues that must be considered as part of a whole.

Private-sector participation: wholesale or retail

Assuming that contributions are collected centrally, should private-sector firms provide a retail service to individuals or a wholesale service to the GSRF? Blind asset allocation, under which asset managers are permitted no access to their list of customers, is used in a variety of countries, such as Sweden (Palmer 2000) and Latvia (Fox & Palmer 1999).

James et al. (2001) show that, in the mutual funds industry in the United States, marketing takes around 43% of all fund costs, echoing a similar figure in the Chilean individual account system. Marketing can be described as adding some value to customers, but high allocations to marketing costs are probably not in the best interest of consumers. Reducing such expenses is often one of the priorities of policymakers around the world.

> From a social point of view, marketing probably provides a mixture of useful information, misleading information, an impetus to good performance, and zero-sum game raiding. The possibility of spreading favorable information by marketing probably acts as a spur to good performance and product innovation. But most methods to keep *IA [individual account] costs low involve a reduction in marketing expenses, under the assumption that much of it is zero-sum and not the most efficient way to provide useful information to new investors.* (James et al. 2001: 16; emphasis in original)

The Indian authorities have been giving considerable attention to the issue of contribution collection in their reform process.[114] The draft discussion document of the IIEF (2004) sets out a rigorous proposal of the process for selecting private-sector managers.[115] The document suggests that policymakers need to assess the advantages and disadvantages of blind allocation of assets, under which asset managers are permitted no access to their list of customers, against the alternative of direct access to customers. In both cases, policymakers also need to apply their minds to how to manage and regulate sale and marketing expenses and prevent potential sales and marketing malpractices.

The advantages of blind allocation, according to IIEF (2004), are:

- lower expenses of sales and marketing, since there is no direct access to customers,
- a lower exit cost in case of de-licensing, since lower intangible sales and marketing assets have been created, and
- a lower supervisory burden through a reduced need to regulate the sales and marketing conduct of providers.

Blind allocation would probably remove the need to establish accreditation standards, since South Africa also has a process for licensing financial institutions, with which the clearing house could then negotiate fees.

The disadvantages of the approach are the potential for

- insufficient marketing, creating the need for the regulator to provide enough information for participants to take informed decisions,
- the regulator to bear the burden for increasing system coverage,
- a complete absence of marketing effort, based on the assumption that all other providers would benefit, to some extent, from the marketing investment of any one of their peers, and
- cross-subsidy from existing to potential customers as existing members would have to bear the burden of all sales and marketing expenses.

The corresponding advantages of giving to providers lists of their customers are that:

- this permits offering loyalty discounts and other incentives to retain customers, potentially reducing overall system costs,
- it motivates providers to undertake marketing and education initiatives, under the protection of the overall charge limits for the system,

The disadvantages of this approach are that:

- overall marketing costs might be higher than under the blind-allocation alternative,
- larger regulatory resources may be required, and
- sub-optimal financial decisions by members is possible, resulting from the distorted incentives and information resulting from provider marketing efforts.

In consideration of the issue for the South African environment, one significant addition should be made to these lists. Contribution collection is just the beginning of the process of retirement saving. The payout phase can be more complex than the collection phase. As the products envisaged for this environment (see section 4.1) are expected to be administratively straightforward but allow reasonable flexibility of payout and the potential for some flexibility around the design of survivor

[114] For a broad explanation of the motivations for reform see OASIS Foundation (2000) and Shah (2005).
[115] Supporting material is available in a second draft paper, IIEF (2006), which discusses the proposed framework for establishing the central recordkeeping agency, but is confidential.

benefits, it would seem appropriate to delegate to private-sector providers the responsibility for managing the accumulated assets, communicating with customers and administering the payout phase.

South Africa has a sophisticated and administratively competent private-sector financial services industry that should be able to manage the communication and payout processes with reasonable ease. Consumer protection is required through price caps and standards of disclosure and governance and this is designed to address concerns around system efficiency.

Finally, under the model being considered at present redirecting contributions to the private sector is not mandatory, it is optional. One of the motivations for effecting this redirection would be a higher level of trust in private-sector entities, not only to produce higher investment returns, but to exercise greater care in the administration of the account, communication to clients and processing of payout requirements. This would be lost if the system put into place blind allocation to managers in pursuit of charge reduction at the cost of a number of other laudable objectives.

Case study: the United Kingdom

> … the core elements of a new personal accounts system will be automatic enrolment, a simple mechanism for collecting contributions and some centralised functions. However, there is one remaining issue – the administration of the accounts, on which we would like to consult further. The decision we take on this issue will depend, among other things, on the appropriate role for consumer choice in this area of retail financial services. (Department for Work and Pensions 2006a: 50)

This paper, by the UK government's Department of Work and Pensions (DWP), sets out some of the issues being considered by the policymaker in that country. During the consultation phase of this policymaking process, some suggested that individuals should be offered the choice of who should administer their pensions. Note that this concerns administration only: it is already accepted that contributions will be collected centrally.

Turner's Pension Commission recommended that all personal accounts should be provided by a single organization, providing a single set of standards and contact point for participants, and that day-to-day running of the scheme would be outsourced to a number of pension providers.

An alternative to this approach is that a number of pension providers would offer personal accounts. This is roughly analogous to the suggestion in this paper that providers have servicing responsibilities towards their participants, making them administrators as well as asset managers.

The DWP paper sets out a useful set of questions for public comment. The same questions should be asked of the South African options and they are quoted below (Department for Work and Pensions, 2006a: 54; formatting altered):

- Would offering a choice of branded provider add value for the consumer?
- Would a choice of branded provider give individuals greater confidence in the system and greater ownership of their accounts?
- What is the connection between type of choice and cost?
- On what basis would individuals make a choice of pension provider?
- What are the pros and cons of vertically integrated providers, offering both administration and fund management?
- With multiple providers how could charges be set in a way that encourages competition to thrive?
- Would it be possible to restrict the number of providers in the scheme to provide scale economies and drive down costs?
- In each approach what information would individuals need?

APPENDIX 3 AUCTIONS

There are a number of ways to reduce costs in a private or partially private system. Some of these approaches are explicit, for example the imposition of a price-cap regime, but can introduce unintended consequences. Other methods, more subtle in their approach, push down prices through altering the dynamics of the competitive process. Disclosure is the simplest example of such an approach, though its effectiveness is not obvious.[116] The clearing-house system of collecting contributions (see Appendix 2) is another approach to reducing costs.

Another way to limit costs is to require providers to bid for a limited number of places.

Auctions in practice

Auctions have been used in systems with limited scale potential – for example, in Bolivia where winning bidders were awarded a five-year duopoly and management of privatized state assets (Von Gersdorff 1997). Charges under this system at inception were relatively low (less than 10% of contributions; Whitehouse 2000b; Devesa-Carpio et al. 2003) but this is partly due to the subsidy of the additional assets.

The approach has not only been used in small systems. The Federal Thrift Savings Plan, in the United States, despite having 2.3 million participants and $65 billion in assets by 1998 deems cost important enough to auction the right to manage parts of the assets of the fund every two to four years. Total cost to members in 1998 was 0.11% of assets (James et al, 2001). This has been reduced still further to around 0.06% of assets, in other words $0.60 per year for each $1 000 of assets (Barr, 2006).[117]

India is in the process of reforming its pension system, compelling retirement saving in individual accounts first for employees of central government and then for civil servants in regional and local government. The hope is that the take-up of individual accounts among workers in the private sector will follow rapidly after that (OASIS Foundation 2000; Shah 2005).

[116] The disclosure system that backs the mandatory individual account system in Australia is onerous on providers. It is governed by the Australian Securities and Investments Commission, outside of the pension regulator, the Australian Prudential Regulation Authority. Despite high standards of disclosure, parts of the Australian system are among the most expensive in the world (Mitchell & Bateman 2003; Rusconi 2004).

[117] The auction is not the panacea that would reduce costs to these levels in all cases. The Thrift Savings Plan also simplifies administration by granting to members investment choice from only five options. Then, of course, the sheer scale of the operation permits very competitive bids for asset management

Given the expectation of very low average contributions to the system, it is important to keep costs as low as possible. Proposals set out thus far include establishing a Central Recordkeeping Agency to provide a single point for the collection of contributions, run by the private sector, and to limit asset management to six managers selected on an auction system, each required to provide three different funds, distinguished by their risk characteristics and subject to investment limitations. One of these managers is to be a publicly owned domestic entity.

The intention is to license a seventh manager once aggregate assets attain a certain level, and more thereafter, according to a similar system of asset thresholds, specified in advance of launching the system. Interested companies are to submit bids with specified technical and financial content, the latter consisting solely of a fee expressed in terms of assets under management. Managers may change their charges during the term of their tenure, but the 'infra marginal bid', the highest fee among the winning bidders, becomes the ceiling below which all managers must operate. This ceiling changes when the next round of bidding is completed.

The aim is to ensure scale efficiencies through:

- the process of price-based bidding for rights to participate;
- the ongoing fee ceiling that then applies to the fees of the successful bidders;
- opening the market to providers in excess of the initial six only after it has reached a specified overall size; and,
- forcing the closure of providers whose market falls below a specified level, currently 5%.

Pros and cons

The main advantages of the auction system are:

- **Cost reduction.** Charges are cut from the average level that would apply to an open-market environment through the selection of the lowest bids (allowing for the impact of variations in the technical quality of bids), reducing overall costs to participants. The requirement to bid also focuses the minds of potential providers on the lowest possible price at which they are able to operate, cutting out all but the most needed margins in the fee scales for risk and cost.
- **Selection process.** All providers are subjected to rigorous screening and explicit assessment of technical capabilities. Since this happens once, rather than spread out over time as applications are received by the regulator in a conventional system without auctions, concentrated effort is applied to the quality of their bids, which should produce a better outcome.
- **Explicit criteria.** The auction provides opportunities for other criteria to be included in the assessment process, explicitly weighted and properly assessed.
- **Free of the risks of caps.** Though a set of price caps may result, as is proposed for India, these caps are determined by the operation of market forces. This contrasts the alternative price-capping approach under which the ceilings are established subjectively by the regulator, which could introduce distortions and unintended consequences.

There are a number of disadvantages of the approach, including:

- **Process failure.** Auctions are not free of risk, particularly of collusion, and these would need to be managed. However, South Africa has recent experience of large secret-ballot bidding exercises[118] and should be able to put this experience to good use.
- **Oligopolistic behaviour.** The possibility of collusion does not end when the bidding is complete. A small number of providers would exert considerable power over a large and growing industry and would be prey to strong temptation to engage in behaviour not in the interest of customers. Prices may well move closer together once the bidding is over.[119] On subsequent bidding rounds, it may be very difficult for other providers to compete with the first set of winners, creating a type of perpetual 'last man standing' monopoly.
- **Subsequent corporate activity.** The possibility of financial failure or predatory corporate activity further reducing the number of providers could worsen the problem of oligopolistic behaviour.
- **Financial instability.** Given that the bidding process would force providers to push prices as low as possible, financial collapse of over-ambitious providers is a possibility. A framework for transferring the members of a failed provider to the others (or automatically to the public-sector provider, the default) should be established, but the costs of this transfer might not be within the financial ability of the failed entity. On a related point, the quoted fees may be insufficient for successful bidders to undertake marketing, possibly denying the participants useful information.
- **Prices too high.** On the other hand, initial bids may be too high, as providers take a cautious line to the risks faced, even in the knowledge that caution reduces their possibility of winning a bid. The rules under which providers are required to operate after the bid will go a long way to limiting this possibility.

As this paper shows at great length, establishing a regulated environment for providers of services to a mandatory saving environment is not easy. This appendix discusses just one approach to ensuring that the market for such services operates as cost-effectively as possible. Auctions, carefully considered and executed, could produce an outcome that is in the best interest of all participants while establishing a competitive, profitable operating environment for successful bidders. The possibility should not be dismissed without serious consideration.

[118] The sale of the V & A Waterfront by Transnet and its pension funds in 2006 is a good example of a tightly run secret-ballot bidding process.
[119] One way to address this possibility is for the terms of the auction to force a price guarantee from the bidder rather than allowing it to change its prices up to the limit emerging from the bidding after the term of service commences.

APPENDIX 4 SURVIVOR BENEFITS

Government recognizes the importance of adding risk benefits[120] to retirement saving as part of an integrated approach to what might broadly be described as an income replacement strategy. [121]The intention is for the PAYG part of the Department of Social Development blueprint to include death and disability benefits as part of the standard set. Full treatment of this complex subject is rightfully part of a separate study, but the questions briefly posed in this section are:

- whether the mandatory defined contribution system should provide survivor benefits at all, and, if it does,
- whether this should be outsourced to private-sector providers where members choose to opt out of the public-sector default.

Related to this, if the answer to the first question is yes, is the issue of how the public-sector entity is to provide survivor insurance.

International examples

Most countries include survivor and disability benefits with the retirement system. A few examples are discussed in the list that follows.

- **Chile.** Providers are obliged to take out insurance for their members, covering both disability and survivor benefits, using a proportion of what is essentially their share of the contribution paid by the member. Ten per cent of salary, up to a ceiling, must be paid towards retirement, which protects the percentage of salary dedicated to retirement saving. Another three per cent is used to cover insurance premiums and the charges of providers.[122]
- **Argentina.** The corresponding system in Argentina is complicated by the PAYG system that remains in existence and takes in participant contributions. Benefits under the PAYG pillar are pre-defined.[123] Similar benefits are provided under the individual accounts system, but the accumulated funds of the participant may be used by the provider to offset the capital cost of providing the benefits in the case of death or disability, protecting against the cost of over-provision.
- **Bolivia** also mandates contributions towards survivorship benefits, but integrates statutory systems commonly separated in other countries. Participants in this system contribute 2% of salary towards the provision of insurance for death and disability from common causes and a further 2% covers the cost of insurance for death and disability from work-related causes.[124]
- **El Salvador**, in common with the models used by many of its larger Latin American peers, requires the fund administrators to provide specified levels of insurance cover within the overall fee that they are permitted to charge, 3% of salary since 2001.[125]
- **Croatia** is an example of a country that does not provide disability and survivor benefits under the second pillar. Citizens are protected against these risks through benefits payable from the PAYG first pillar. Compensation, however, is provided to disabled second-pillar members and the dependants of deceased members, in the form of an underpin involving a combination of first-pillar and second-pillar benefits (Anusic et al. 2003).
- **Latvia** included disability benefits in its notional defined contribution first-pillar system, but established the benefits in a slightly different way to other countries. Disability benefits apply only to the working-age period. Thereafter disabled participants receive the old age benefit, or, if higher than that, the disability benefit (Fox & Palmer 1999).
- **Australia** is unusual in not mandating any survivor or disability insurance.[126] The first pillar pays benefits that start at a specified age, currently 61? for women and 65 for men,[127] but no benefits in the event of disability or early death. The second-pillar "superannuation system" requires contributions of 9% of salary towards retirement, but does not provide benefits in the event of disability or death prior to retirement. The decision of whether to provide for such events is left to the discretion of the individual, just as investment decisions during the accumulation phase and the form of benefits thereafter is also subject to considerable individual choice.

In many of the developed countries with multi-pillar systems, explicit provision for death and disability is not made by the state but is an established part of occupational or collective arrangements, but this is not necessarily co-ordinated with additional provision available through statutory structures.

In summary, disability and survivor benefits are very rarely excluded from pension arrangements and they form an explicit part of nearly all second-pillar mandatory individual-account systems. The cost of insurance cover is usually met through additional contributions by the member, expressed as a percentage of salary, and either fixed by the policymaker or combined with the fee paid to the pension provider for administration services.

South Africa

This may be contrasted with the system currently in place in South Africa:

- Benefits are provided through occupational funds and supplementary private-sector arrangements.
- In occupational funds, trustees usually select the level of benefit appropriate to the members, frequently having to manage upward pressure on risk-benefit insurance costs resulting from the HIV/Aids pandemic and the considerable complexity of paying out death benefits to the most appropriate recipient.
- In individual arrangements, cover levels are at the discretion of the saver and subject to considerable variation. There is a reasonable level of product comparability but this can be confused by the bundling of various types of cover. Underwriting requirements may result in sharply higher contributions or exclude individuals from cover altogether.[128]

[120] The term risk benefits is used to describe the amounts paid to the dependents of a participant in the event of that participant's death, usually paid until the corresponding death of the dependent, and the amounts paid to a participant in the event of permanent disability.

[121] This oversimplifies the objectives that government seeks to meet in establishing a coherent old-age policy. It seeks to provide some minimum level of provision to those that have no income during their working years. Hence we have a social-grant system that is not primarily about replacing income. To the extent that unemployment insurance is a type of income replacement, it should also form part of the overall strategy, but it is usually considered a useful adjunct rather than a fundamental feature of what is essentially a retirement-disability-and-survivor system.

[122] Writing some time ago, Monika Queisser (1998) suggested that providers have found ways to reduce insurance charges, but generally keep the balance of the 3% as profit rather than passing it back to customers in the form of lower charges. Later writing by Acuña and Iglesias (2001) suggests that this dynamic had changed, quoting an average fee for insurance and charges of 2.3% of salary.

[123] "Disabled workers receive 70% of their salary before the disability and survivors receive between 50% and 70%, depending on the family structure." Benefits are reduced in the event that members have failed to participate in the system in the years prior to the death or disability (Rofman 2000: 7).

In both group and individual arrangements, considerable variations exist in the level of cover and the definition of events giving rise to the payment of benefits. In comparison with standardized national arrangements in place elsewhere, solidarity is lower and administrative costs are higher, particularly in individual arrangements, where underwriting differentiates risks at a higher level of detail and increases costs. In common with all private-sector arrangements, some expense on commission and other distribution costs is a feature of the system, and this is also more extreme in the case of individual arrangements.

There appears to be a very strong case for collectively provided minimum levels of protection for members of the retirement saving system, reducing system costs and increasing the potential for risk-sharing through principles of solidarity.

This could be introduced through the PAYG pillar, the individual-account pillar, or a combination of the two. Redistribution is best achieved through the PAYG pillar and earnings-related benefits through the individual-account pillar, which is also the best provider of additional risk cover. Further analysis is required to determine what would best meet match the objectives of the system and this is the subject of further study. For now, it is assumed that some level of disability and survivor benefits are provided through both parts of the system.

Opt-out provision

The remaining question, then, is whether the insured benefit could be provided through accredited opt-out providers. A number of advantages of such an approach can be identified:

- **Insurance experience and competitive pricing.** Insurers provide an important intermediation role, accepting and managing uncertainty through the application of shareholder capital and technical skills to an uncertain environment. While they do so in the hope of gaining a profit, competitive forces should keep the price-increasing impact of the profit motive under control. This introduces the risk of suffering financial difficulty or collapse, but prudential management principles keep the tendency to reduce prices in pursuit of business in check, limiting the possibility of financial difficulty to an acceptable level.
- **Administrative simplicity.** Allowing participants to opt out of a central arrangement into a product of their choice would seem to run the risk of increased complexity, but the reverse could also be true. Since providers will be managing retirement savings, allowing participants also to opt out of centralized provision of survivor benefits **to the same provider** may reduce complexity.
- **Servicing accountability.** Other parts of this paper (see Appendix 2, for example) argue that it would be better to give providers access to their member details in order to increase the responsibility to service these members effectively. This creates a mechanism for accountability that is supported by regulatory structures and the establishment of an ombudsman to manage participant complaints. Similar arguments could be used to motivate the inclusion of risk benefits with retirement savings in the hands of private-sector providers.

A number of disadvantages would need to be considered as well:

- **Product cross-subsidy.** If benefit and savings levels are standardized and participants must opt out to the same provider for saving and insurance benefits, providers might find ways to cross-subsidize one product through the fees of the other. This has the potential to distort efficient market process, particularly where consumers are more sensitive to one price than to the other.
- **Cherry-picking.** Free-market pricing introduces underwriting expense and the potential for certain participants to be excluded from cover. The alternative is some form of price standardization. This in turn introduces the problem of cherry-picking. Whatever the basis used for standardized pricing, it divides the market into profitable and unprofitable individuals, opening the door to the very lucrative practice of picking the best customers. A risk equalization fund is one way around this, but it is not easy to implement, not least because it needs to keep track of all possible risk factors, not only those actually in use for pricing risks at the time of its introduction.
- **Conflict-of-interest potential.** If accredited providers of savings products are not required to bear the risk of the insurance products themselves, a huge interest in the insurance book of these providers is created, in turn establishing the potential for undesirable market practice. This is not an attractive scenario, but neither is the alternative.
- **Different skill sets.** The alternative model is that accredited providers of saving products must make available risk cover rather than contracting it out. This would systematically disadvantage firms with strong administration and investment skills but no insurance experience. Also, if providers are required to take on insurance risks, the range of potential providers is substantially reduced, potentially creating an environment similar to that which has given rise to the concentration of retirement annuity providers.[129]
- **Lower transparency.** Since providers are selling two different types of product, standardization and comparability become more difficult to establish. Consumers are likely to have a lower understanding of the products that they purchase and may exercise selection less efficiently, in the sense that they do not exercise their choices according to the product features that objectively matter to them.
- **Public-sector provider.** If members can opt out of a default to obtain survivor benefits, it stands to reason that the default should also provide such benefits. A state-owned insurance entity could introduce an additional set of problems to the environment as it could potentially take a

[124] In Chile, work-related benefits are provided from a separate system.
[125] Maximums in the early years of the system were higher than this to permit administrators to set up their systems and then gradually reduced as scale developed (Acuña 2005).
[126] The primary source for this paragraph is Bateman and Piggott (2001), but the unusual absence of disability and survivor benefits has also been confirmed directly with a contact at the regulatory authority.
[127] The retirement age for women is being raised to 65 by 2014 (Bateman & Piggott 2001)
[128] Suppliers generally regard this type of business as characterized by fairly high profit margins.
[129] National Treasury (2006) quotes the 2004 report of the Registrar of Insurance statement that the five largest South African insurers, excluding reinsurers, look after more than 76% of industry assets.

different approach to the risks involved and gain unfair competitive advantages over its private-sector counterparts.

These two short lists, incomplete surely, demonstrate a little of the complexity of the issues involved. Many of the disadvantages are concerned with issues of transparency, disclosure and the effectiveness of market operation. These should be managed as part of the rule set governing the entire opt-out environment. Issues affecting the public-sector provider may be more acute in the area of risk benefits, but should also be managed through the broad approach to ensuring fair competition between the public-sector entity and its private-sector counterparts.

This suggests that, with sound approaches to mitigating the risks, it is feasible to permit opting out of death and disability benefits to private-sector entities. The details need to be considered with care, but perhaps the best way to stratify risk is to provide a basic level of cover through a centrally managed system and allow opting out to private-sector providers above this level, with pricing and underwriting on a free-market basis.

APPENDIX 5 ANNUITIES

When designing a pension system, policymakers often err in favour of focusing their attention on the build-up phase, the stage during which savings are accumulated, at the cost of consideration of the decumulation, or consumption, phase. This is usually appropriate, since design changes usually affect the accumulation phase with immediate effect but impacts on the decumulation are delayed.[130] But failure to plan for the payout phase could be detrimental if design features in accumulation lead to undesirable consequences in payout.

Analysis of the South African market

South Africa's annuity market is deep and well-developed. Rusconi (2006a) sets out a systematic analysis of the conventional annuity market, noting that:

- the evidence appears to support the view that the market is broadly competitive and provides, on average, good value to customers; and that
- pricing is generally transparent and inclusive, leaving providers no opportunity to cover costs or add to profits at a later stage in the contract;[131] but that
- with a few exceptions, individuals with a lower expectation of life are systematically disadvantaged by the pricing basis adopted by providers.[132]

He notes that it is the market itself that introduces this perverse disincentive to offer better rates to the poor, rather than the providers. He asks whether the only realistic alternative provider is the state and notes that, to the extent that it pays a guaranteed pension to a meaningful proportion of the population, it already provides a limited intermediation service, taking on longevity risk as it does so.

Rusconi's research covers only the guaranteed annuity market, so-called conventional annuities that pay an income that is guaranteed for life but does not increase. The same conclusions are not necessary valid for other types of annuity, those that increase at a fixed rate or at the rate of inflation, for example, and those that are tied in some way to the rate of return on underlying assets, the with-profit and unit-linked annuities.

Inflation-linked annuities provide the desirable feature of income that increases with the rising cost of living. However, more complex risk management and a scarcity of appropriate asset classes push down the value for money provided by these products.[133]

With-profit annuities suffer the difficulty of opacity, the open-ended flexibility of declared annual bonuses and absence of disclosure of the annual charge providing considerable flexibility to the insurer to recover losses resulting from mortality losses, which occur if an annuitant lives longer than expected, on average.[134]

Unit-linked annuities are potentially opaque as well. Theoretically, insurers should be paying out more than the annual return on the underlying assets, through rewarding the survivors by sharing out the profits to the insurer from the cessation of payments to deceased annuitants. It is not clear that they do so. It is quite possible for insurers to take advantage of consumer misunderstanding of the dynamics of the market to make a tidy profit and pay out good-looking annual returns.

Intermediation: should insurers provide annuities?

Can the private annuity market deliver? (World Bank 2005: 162)

Rusconi takes the view that insurers are well positioned to service this market, as they have

- the balance sheets to absorb… and
- the technical skill to manage…

… the financial risks associated with their intermediation. This doesn't mean that they do a good job of it. The issue of systematic bias against low-income annuitants has been noted, as has the potential for opacity on with-profit and unit-linked products. What it means is that insurers have the greatest capacity to manage the risks associated with the provision of annuities and that, were they to choose not to, others, at least in the private sector, would be unlikely to step into the breach.

This position is consistent with the view set out in this paper that accredited financial services firms should be responsible for servicing their clients and for managing their payouts.

This does not address the issue of value for money to the poor, where state intervention may be the only feasible option. The author recommends that consideration be given to establishing a public-sector entity responsible for providing annuities to all participants with an accumulation of saving at retirement below a given level, with no option for opt out. Such an entity would not interfere in the appropriate pricing of the more lucrative upper end if the market can be clearly delineated into two segments according to the level of accumulated savings at retirement. The potential for gaming by participants close to the divide between these two markets needs to be considered with care.

[130] In some countries, notably the Eastern European reformers, citizens above a certain age are forced or encouraged to remain members of the state social-security system. Members of the newly created individual-account system are therefore exclusively, or on average, younger, and decisions about the design of the decumulation phase are not required with urgency.

[131] This makes a mockery of the argument from providers that, in the accumulation phase, they must retain the right to increase charges on administration in order to protect themselves against cost uncertainty. The same providers (generally) manage very long-term administration risks very well under annuity contracts.

[132] Pricing by age and sex is generally accurately carried out and a small number of providers offer special rates to smokers and very ill applicants, but there is no systematic allowance for the shorter expectation of life of low-income applicants.

[133] James and Vittas (2000) calculate that index-linked annuities offer money's worth ratios some between seven and nine percentage points lower than the corresponding ratios for flat annuities.

Standards for annuity providers

Can every accredited firm provide annuities? What should be required of annuity providers?

The requirements for selling annuities are not the same as the corresponding requirements for managing accumulated assets. Asset accumulation does not involve the same level of financial risk or require the pricing and investment skills needed for providing annuities with reasonable margins for safety.

Firms licensed to provide administration and asset management of mandatory savings should therefore not automatically be permitted to sell annuity products. Accreditation of annuity providers falls under the licensing requirements of the Registrar of Long-term Insurance and should continue to do so, subject to ongoing review of the technical requirements of these firms and prudential regulation of their reserves.

This suggests that some accredited providers of administration and asset-management services in the mandatory accumulation phase will also be providers of annuity products and some will not. Those firms providing both sets of products should not be provided a systematic advantage over those who do not. This is because the products require very different skill sets and firms that are able to operate in both markets should be required to compete, on an equal basis, with their peers in each market.

This suggests that retirees should be able to exercise their right to purchase an annuity from any provider – often referred to as an 'open-market option' – rather than being tied in to purchase an annuity from the company that has managed the accumulation up until that time. In fact, they should be encouraged to do so.

The rationale for this open-market option is strengthened by the empirical evidence that annuity prices are volatile, moving considerably from provider to provider, even from one month to the next.[135] Any restrictions on the set of annuity providers could have a significant detrimental impact on the annuity price obtained by the annuitant.

Consideration has been given to the possibility that every provider of annuity products should be required to provide a full range of products. This would not be appropriate because it may force providers to take risks that are imprudent, potentially affecting the firm and its clients. However, a degree of standardization should be required of providers to make product comparison easier.

The following suggestions should be explored:

- Any provider selling annuities with fixed increases must make available a product with increases of, say, 3% a year.[136]
- Joint life and survivorship annuities, which pay at a reduced rate to the surviving spouse of the original annuitant, must be available at a rate of 50% of the original annuity, and separately at a rate of 75% of the original annuity.
- With-profit annuities, which typically offer a range of implied discount rates, giving purchasers the choice of taking more up-front in return for lower annual increases, if they are sold at all, must be available at an implied discount rate of, say, 3%.

Index-linked annuities

Finally, suppliers should be strongly encouraged to make available index-linked annuities. No other annuity provides complete protection against the two most important risks after retirement:

- the risk of outliving one's assets, and
- the risk of financial loss as a result of income failing to keep up with prices.

Concerns have been raised that index-linked bonds are available in insufficient quantity to make the purchase of such assets cost-effective to providers, and their clients. Government should be encouraged to continue issuing more index-linked bonds to support its policy objective that individuals be protected in retirement against the effects of inflation. Ways should be found to encourage the private sector to follow suit. Few countries seek to protect their citizens against inflation more effectively than Chile, where guaranteed annuities are not available without inflation protection and the primary monetary unit in the pension system is index-linked.[137]

Difficulties in selling the products at value-for-money ratios as high as for conventional flat annuities have been noted. These problems would be reduced by keener demand, itself stimulated by better supply, and by addressing the issue of the thin market in index-linked bonds.

Compulsory annuity purchase

It is extremely difficult for an individual to assess correctly his or her options at retirement, trading off the benefits of longevity insurance (through annuity purchase) against the potential for higher investment returns and the bequest available on early death (if an annuity is not purchased). Even experts find it hard to agree on the correct decision under a specified set of circumstances. Changing investment conditions do not make the trade-offs easier to assess. In the case of a postponed annuitization, the slowly shifting dynamics brought about by an individual's increasing age only complicate the matter further.

It is thus not surprising that determining whether the authorities should force participants to purchase an annuity at retirement is fraught with complexity. Policymakers should take care to consider the full range of issues impacted by this decision – forcing every participant to purchase an annuity can have a profound impact on the pricing of those annuities – to avoid exposing annuitants to unforeseen harmful consequences (Rusconi 2006b).

Living annuities: the income drawdown alternative

Living annuities serve to complicate the issue yet further. They ought not to be defined as annuities at all because they provide no longevity insurance; they simply provide a vehicle for

[134] With-profit annuities invest in a mix of assets and pay-out declared bonuses that are related to the return actually obtained under those assets but are never less than zero and sometimes provide index-linked returns. Providers seldom disclose the returns gained on the underlying assets or the charge for providing this guarantee, making proper analysis of these products extremely difficult. Unitized annuities provide annual returns in line with the investment returns of the underlying assets, often providing flexibility to the annuitant regarding how the assets are invested.

[135] This unexpected phenomenon is not limited to South Africa. Prices in the United Kingdom market, the world's deepest, are similarly subject to unexpected variations, despite the overall competitiveness of the market (Mackenzie 2006; Cannon & Tonks 2006) and research in the United States shows similar price spreads (Mitchell et al.. 2001).

[136] The rate could be modifiable by instruction of the Registrar of Long-term Insurance to reflect changes to current conditions and could be extended to more than one rate.

[137] The UF, or *unidad de fomento*, is the monetary unit for all pension payments and is indexed to the consumer price index.

accessing accumulated retirement capital in a controlled manner. Customers facing the choice are often subject to the perverse incentives of intermediaries who recommend them in preference to conventional annuities because they receive some asset-based income. Intermediaries are also unlikely fully to comprehend the risks involved in income drawdown products.

Whether and how to offer living annuities must come under the careful consideration of the policymaker. One option is to allow some flexibility to cater for individual circumstances and the growing incidence of phased retirement but to mandate the purchase of longevity insurance for a specified minimum proportion of retirement saving at or before a given maximum age, say ten years after the normal retirement age.

APPENDIX 6 AUSTRALIAN CASE STUDY

This paper does not have room for detailed descriptions of a number of national systems, but recent information emerging from the Australian environment provides interesting lessons for South Africa.

- Among OECD countries, Australia is unusual in a number of respects:
- prior to the reform citizens did not enjoy high levels of coverage either in occupational plans, defined benefit or defined contribution, or under state social security (Gordon, 2003), and now,

In a very short time, the country has established a large retirement industry. Five broad types of retirement entity exist.

- **Master trusts** are multi-employer arrangements that provide both retirement and risk benefits. Profit-motivated and distributing mainly through commissioned sales channels, master trusts also welcome individual members. The largest master trusts have hundreds of thousands of members.[138]
- **Industry funds,** so-called because they grew out of the industry-wide and union-based arrangements of the past, have until recently been closed to the general public, but now offer a not-for-profit inexpensive alternative to master-trust arrangements, usually with limited flexibility. Large industry funds also have huge membership, many of them outdoing the master trusts.[139]
- **Occupational** arrangements continue, most of them defined benefit, but are on the decline.
- **Public-sector workers** are covered under separate schemes.
- **Self-managed Super Funds** and arrangements for small groups of employees that are attractive to members proliferate because of the freedom to members to direct retirement savings as they choose.

The table below sets out the significance of each of these arrangements.

Table A1. Australian industry segments

	Funds	Member accounts ('000)	Total (A$ bn)	Assets Per fund (A$m)	Per account (A$'000)
Corporate (standalone)	555	606	52.4	94.4	86.5
Industry	91	9 793	150.5	1 653.8	15.4
Public sector	44	2 899	152.0	3 454.5	52.4
Small funds	326 641	627	214.8	0.7	342.6
Retail (master trust)	192	14 974	298.4	1 554.2	19.9
Other	n/a	n/a	43.9	n/a	n/a

Source: Rice Warner (2007:12), data from the Australian Prudential Regulatory Authority as at 30 June 2006. "Other" refers to superannuation amounts included in life office statutory funds that APRA has not attributed to fund type.

Australians depend very heavily on mandatory advance-funded individual accounts, as by far the most significant vehicle for retirement saving.

This makes the Australian Superannuation system – simply 'super', as it is sometimes known – one of the cleanest examples of a mandatory account system introduced into an environment with limited pre-existing infrastructure, and for that reason, a very important research environment.

The Australian environment is puzzling because of the wide range of fee ratios across different types of providers. Whitehouse (2000b) calculates the difference in annual reduction in yield[140] between master trusts, 1.91%, and industry funds, 0.51%. Chant West (2004) provides figures for each of the largest providers that demonstrate a similar quantum of difference between master trusts and industry funds as those calculated by Whitehouse.[141]

[138] Chant West (2004) reports AMP membership of 680 000 and MLC membership of 340 000.
[139] Membership of 700 000 for Sunsuper, 550 000 for ARF and 450 000 for STA is reported by Chant West (2004).
[140] The reduction in yield is the percentage point reduction in annual return over the period of saving that is equivalent in overall impact to the erosion of value due to all charges.
[141] Chant West (2004) calculates reductions in yield for four large master trusts that lie between 2.07% and 2.43% and corresponding figures for the largest industry funds of between 0.67% and 0.71%.

Mitchell and Bateman (2003) echo these figures and demonstrate the impact on cost of, on the one hand, retail against employer-sponsored funds, and on the other, small and large groups of customers. Chant West (2003) echoes this sentiment. These figures suggest that average group size goes some way to explaining differences in charges. Table A1, however, shows that these relationships could not explain the empirical differences in the charges of master trusts and industry funds.[142]

Then again, not all researchers agree. Rice Warner figures suggest that wholesale master-trust plans – it defines plans as large if they have more than A$5million in assets – actually charge less than their industry-fund counterparts. The report goes on to suggest that, while small funds charge considerably more than industry funds, the differences are not as great as those quoted by Whitehouse and have not been for some time (see Table A2).

The differences are not easily resolved, but they need to be examined if their sources are to be understood. A clue may lie in a note to the calculations set out by Chant West (2004) to the effect that advisers are assumed to receive a fee of 2% up front and what it refers to as standard trail fees. The analysis of Rice Warner, which considers all actual expenses, suggests that advisers are not receiving fees as high as this. Furthermore, these fees appear to be falling. The cost of advice, as a percentage of assets, to large corporate master trusts has fallen from 0.10% in 2004 to 0.02% in 2006. The corresponding fall for smaller master trusts is 0.50% to 0.46% and larger falls have been noted for personal superannuation products and retirement savings accounts.

Table A2. Trends in Australian charges for selected segments

			Expense rate (% of assets)		
			2006	2004	2002
Wholesale	Corporate		0.78	0.75	0.86
	Corporate Super Master Trust >	A$5m	0.81	1.14	1.24
	Industry		1.13	1.18	1.23
	Public sector		0.70	0.66	0.63
Retail	Corporate Super Master Trust <	A$5m	2.01	2.11	2.36
	Personal Superannuation		2.12	2.30	2.41
	Retirement Savings Accounts		2.30	2.30	2.30

Source: Rice Warner (2007:5).

Longitudinal studies in Australia are important because regulatory changes have recently been introduced. In the middle of 2005, members were permitted to select their provider – previously only the employer could make that choice. Furthermore, licensing requirements have been tightened. Mandatory licensing of trustees was introduced in mid-2004 with a two-year transition period. The requirements are fairly substantial and expected to lead to some industry consolidation.[143]

A detailed assessment of these licensing requirements must form a key part of the next stage of the assessment of accreditation standards in South Africa.

Asher's (2004) examination of the substantial cost differences concludes that distribution costs are the main cause of the differences between master trusts and industry funds, but not the only one:

> The higher costs of retail funds can be explained largely by the costs of distribution. While the distribution system also offers advice to members, much of it appears unnecessary. There appear also to be a number of conflicts of interest and instances of excessive charging. Some of the distribution costs, and what looks like a greater amount spent on the administration of self-managed funds, arise from the complexity of the tax and social security codes and the many opportunities for avoidance. Investment management charges also appear to be high relative to the underlying costs. This is difficult to explain as the costs are clearly disclosed, and there is significant choice and competition in this area. (Asher 2004: 27; paragraph breaks removed)

[142] The master-trust community achieves higher average account balances and almost as high a level of assets per provider as its industry-fund counterpart.
[143] These comments were provided by Merrie Hennessy of the Australian Prudential Regulatory Authority in e-mail correspondence with the author.

Table A3. Trends in market mix in Australia

	Number of entities			Assets under management (A$ bn)		
	2006	2005	2004	2006	2005	2004
Corporate	555	963	1 394	52.4	52.5	50.5
Industry	91	92	115	150.5	119.8	94.0
Public sector	44	43	41	152.0	128.6	112.1
Master trust	192	226	235	298.4	242.6	207.5
Small	326 641	309 546	289 132	214.8	175.2	138.8

Sources: APRA (2006a:11, 2006b:16) and Rice Warner (2007:12) quoting APRA data.

His paper is worth examination by readers interested in the dynamics of the Australian system and the lessons that might be applied to South Africa, particularly as the non-profit industry-funds sector presents a number of characteristics that would make it effective in our environment.

What can we tell from the available evidence?

- **Charges do not appear to have fallen significantly.** While charges appear to have come down sharply in certain industry segments, like the provision of advice, the same is not necessarily true of the industry as a whole. Rice Warner points out an overall fall in industry average fees over the last two years from 1.30% of assets annually to 1.26%,[144] but this does not seem particularly impressive in the face of an increase in total assets from A$625 billion to A$913 billion. Some sectors seem to be more competitive than others and the intermediary community appears to be taking a sizeable share of the reduced fee income, but the overall figures have fallen only marginally, on much higher assets under management.[145] It is suggested in Australia that one-off expenses associated with regulatory compliance may have damped the fall in charges that would otherwise have taken place.
- **Consolidation is indeed taking place.** Except for small funds, the number of providers is falling, particularly industry and master-trust entities (refer to table A3). There is also just a hint of growing pressure on master trusts to be the benefit of industry funds. Even though master trusts experienced a slightly greater increase in membership between 2005 and 2006 than industry funds (4.7% against 2.6%) the master trust sector consolidated in numbers while industry funds did not.[146]

Charges are probably not as low as the authorities would like them to be and focus continues to be laid on implementing the multiple objectives of improving the security of retirement saving and motivating consumers to obtain the information and act in a way that maximizes their benefit. The market dynamics in Australia, as in any country, are complex.

[144] The press release put out by the Investment and Financial Services Association, which commissioned the research, is up-beat about the results: "This year's report assesses the industry just one year after the introduction of Superannuation Choice and clearly shows that, competition and increasing FUM [funds under management] is putting downward pressure on the average fees across the Super industry." Examination of the evidence suggests that euphoria would be a little premature.

[145] This illustrates the potential for confusion in the area of charges. If the analysis had focused on charges as a proportion of contributions paid, it may well have come to the completely different conclusion that charges are in fact rising.

[146] The growth in assets under management in the year to 30 June 2006 was 23.0% while the corresponding growth for industry funds was 25.6%. This results from a combination of shifts in membership profile and the asset returns emerging from different asset mixes, so reading too much into this trend is cautioned against.

Notes

Part 4

Framework for Post-Retirement Protection in Respect of Medical Scheme Contributions

by Prof. Heather McLead

Part 4

CONTENTS

Introduction and Background

1. Introduction and Background

1.1 Purpose of the Report

This report forms part of a series of technical reports commissioned by the Department of Social Development as part of the retirement reform initiatives of the South African government.

Cabinet mandated the Social Cluster of Directors-General to establish a comprehensive social security system for South Africa. The components of the system are a universal non-contributory system (or social assistance), a mandatory contributory system and regulatory oversight of additional voluntary arrangements. Comprehensive reform of the entire social security system was described in the Taylor Committee report of 2002[1]. By mid-2006 significant progress had been made in respect of the development of a strategic framework for the reform of retirement provision[2].

The framework recommended by the Department of Social Development includes the following elements:

- A universal basic flat benefit, which extends the existing means-tested State Old Age Pension (SOAP);
- A mandatory contributory tier for all income earners, which is recommended to be equivalent to 15% of gross remuneration. It is suggested this may be split 50/50 into a pay-as-you-go (PAYG) portion and a defined contribution (DC) portion;
- The mandatory contribution would be collected by the South African Revenue Services (SARS) and be paid over to a new central fund, the Government Sponsored Retirement Fund (GSRF);
- The PAYG component would provide retirement benefits, survivor benefits and post-retirement protection in respect of medical scheme contributions;
- Provision would be made for individuals to opt out of the GSRF for the DC portion of the mandatory tier but would only be permitted for an accredited retirement fund.

In October 2006 the Department of Social Development issued Terms of Reference for a series of technical reports to more fully research and develop each aspect of the recommended framework.

In February 2007 National Treasury released a further document on retirement reform[3]. While the Treasury document includes health insurance in the definition of a wider social security framework, the post-retirement protection of medical scheme contributions was not included. Health insurance was considered to be beyond the scope of the Treasury discussion paper but it was recognized that progress towards a basic contributory income protection system could provide a platform for other reforms, including health insurance.

An Inter-Ministerial Committee has been formed to lead the process of social security and retirement reform within government, chaired by the Minister of Finance, and including the Ministers of Social Development, Labour, Health and the Minister in the Presidency.

This report was commissioned by the Department of Social Development to promote discussion and provide more detailed input to the Inter-Ministerial Committee on the issue of the protection of post-retirement medical scheme contributions. The report seeks to provide linkages to the proposed framework for healthcare reform[4] and in particular to the Risk Equalization Fund which is being established under the supervision of the Council for Medical Schemes[5].

1.2 Nature of the Problem

The essence of the problem of healthcare cover for those in retirement is that healthcare costs rise at exactly the time that income reduces. This results in an affordability 'crunch' for those in retirement.

The Social Development report on retirement reform[6] concludes:

> The protection of post-retirement medical scheme contributions would represent an important step in improving access to healthcare for key vulnerable groups. As people age their health needs grow. However, in retirement incomes decline. Declining incomes in retirement cause retirees to drop out of the contributory health care environment (medical schemes) at a time where their health needs are greatest. In addition, where a breadwinner dies or becomes disabled without sufficient insurance, whole families can lose access to contributory healthcare services.

The diagram below illustrates the key elements of this phenomenon.

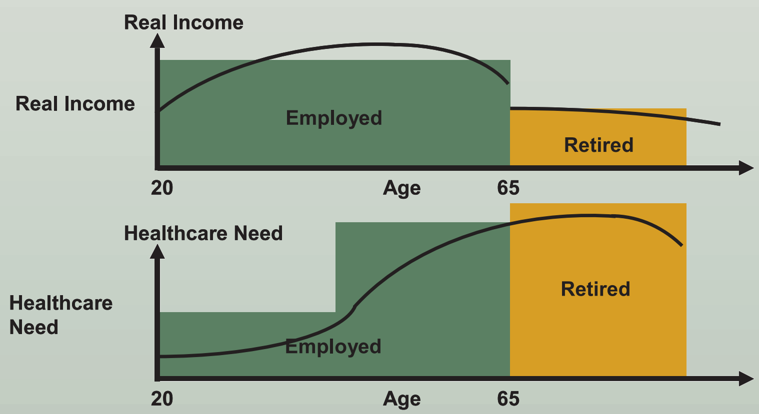

Figure 1: Illustration of the Affordability 'Crunch' in Healthcare

[1] Department of Social Development (2002), *Transforming the Present – Protecting the Future*, Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa.
[2] Published in April 2007 by Department of Social Development. *Reform of Retirement Provisions: Discussion Document. Building a Caring Society. Together.*
[3] National Treasury (2007) *Security and Retirement Reform: Second Discussion Paper.*
[4] Ministerial Task Team on Social Health Insurance (2005) *Social Health Insurance Options: Financial and Fiscal Impact Assessment.*
[5] Draft Medical Schemes Amendment Bill 2007, published in the Government Gazette of 24 November 2006.
[6] Department of Social Development (2007). *Reform of Retirement Provisions,* p. 96.

This problem is found in all countries and there are many ways society can organize the social security system to deal with this issue. In South Africa, until the mid-1990s, many employers provided an increased medical scheme subsidy in retirement. It will be demonstrated why this subsidy is no longer secure for retired people and is now rarely included in the employment package of those still working. The Social Development report argues that:[7]

> Protecting continuity of cover cannot be effectively achieved through private savings vehicles or insurance. Some might get good cover, while others get none. Where a tax break is offered to incentivise coverage, as with other forms of retirement provision, the benefits primarily accrue to high-income groups. This form of protection is however best achieved through the use of social security institutions designed to smooth incomes over time.

To best eliminate the social security gaps that have arisen in relation to medical scheme cover, it is recommended that a system be implemented that integrates a number of social security entities. The purpose of this integration would be to establish a mechanism whereby individuals create an entitlement to subsidised post-retirement contributions based on their years of contributing to a medical scheme.

The diagram below illustrates the loss of subsidy and proposed solution.

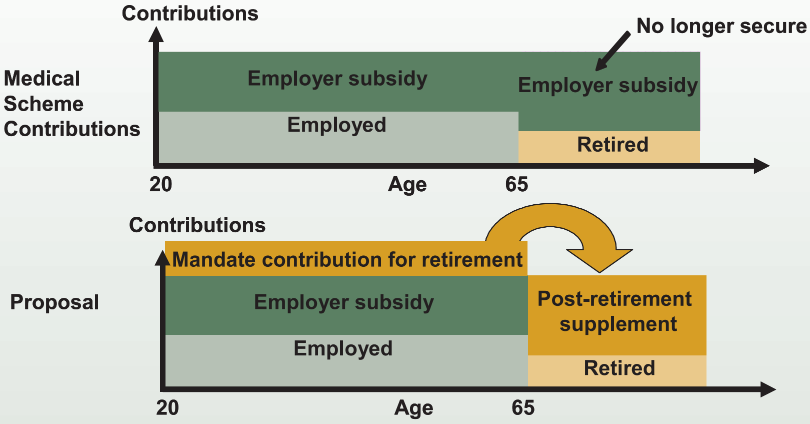

Figure 2: Illustration of the Loss of Subsidy and Proposed Solution

1.3 Structure of the Report

In order to understand what might be possible for post-retirement protection of medical scheme contributions we first need to understand the on-going reform of healthcare in South Africa and particularly the reform of medical schemes, as outlined in section 2. The cost of healthcare is largely determined by age and chronic disease. This is discussed in section 3 and an estimate is made of the reduction in healthcare costs under mandatory membership.

Section 4 deals with employer subsidies of healthcare and in particular with the removal of subsidies after retirement. The degree to which income cross-subsidies can be offered in existing medical schemes is explored. Section 5 identifies the number of people likely to be in a mandatory healthcare system and the number of retirees in the system. The social security contribution needed for health is estimated under three different contributor scenarios and the direct cost of healthcare to consumers is determined at various periods of healthcare reform.

Section 6 deals with principles for funding for post-retirement healthcare contributions and Section 7 describes the envisaged institutional framework. The major risks and ways to address those risks are covered in Section 8. Section 9 deals with outstanding implementation issues.

[7] Department of Social Development (2007). *Reform of Retirement Provisions*, p. 96.

2. Reform of Healthcare in South Africa

As with the retirement system, the South African system of healthcare has followed a rather unusual path compared to other developing countries. The private-sector system of not-for-profit[8] medical schemes has evolved from a fully privatized arrangement based on occupational and individual cover. Medical schemes provide cover for only some 7 million people or some 14% of the population. For slightly less overall expenditure, public-sector facilities provide care for some 40 million people on a means-tested basis. The private sector is characterized by excessive cost escalations and continuing affordability problems for low-income earners and retired people. Coverage in medical schemes is strongly associated with income, as shown below.

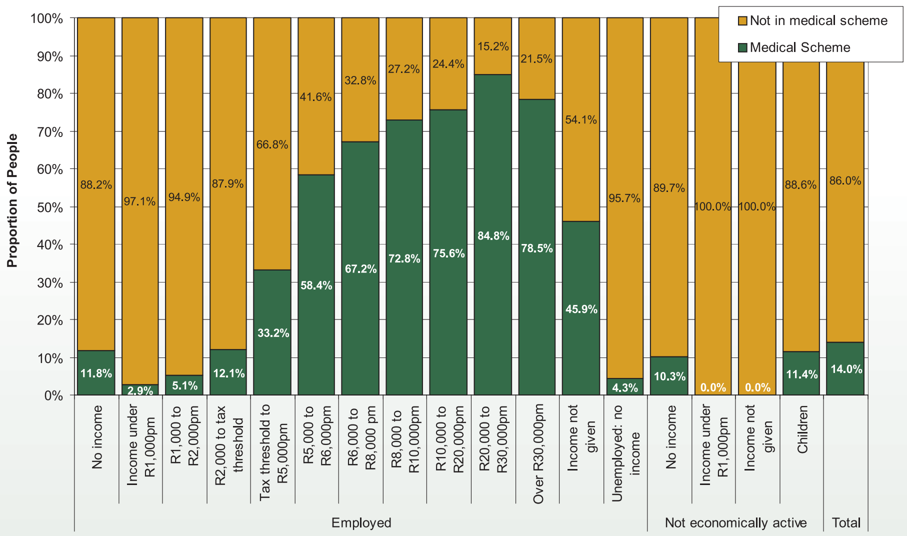

Figure 3: Coverage in Medical Schemes by Income and Employment Status

Source: General Household Survey 2005

The graph above shows that only 33.2% of people earning in the income band just above the tax threshold are members of medical schemes. The proportion in medical schemes rises with income to reach some 80% at the highest income bands. The number of people in each income band is illustrated later in the report in Figure 13.

Like retirement, the health system in South Africa is a fragmented three-pillar system[9]. While progress has been made on a minimum level of benefits in the public and private sector as a first pillar, the government subsidy of the first pillar is not equitable across the public and private sectors. Those using the public sector are subject to a means test, while those using the private sector receive tax subsidies. Despite tax reforms in 2006, the subsidy still favours the highest-income earners and low-income earners fare worst.

Although there have been substantial reforms to re-introduce solidarity[10] in the second pillar, healthcare contributions to medical schemes remain voluntary. The Taylor Committee recommended that the key reform for both retirement and healthcare should be the development of a mandatory contributory system for those who can afford to contribute.

2.1 Reform of Medical Schemes since 1994

The President announced the commitment to a Social Health Insurance scheme in his State of the Nation Address in 2003. In July 2003 the previous Director-General of Health, Dr Ayanda Ntsaluba, described these reforms[11] as "a very significant change in the structure of health care financing in this country". He described the history of reform as follows:

> In the 1980's, when we started speaking about national health insurance, we were faced with a highly fragmented health care system, with great inter-provincial inequities and an unregulated private health care market contributing to extreme cost escalation in the health sector. When the ANC-led government came to power in 1994, it became clear to us that the problems we inherited would not be addressed by any magic bullet. Instead, we established two Committees of Inquiry, and later a departmental task team to advise us on how we should proceed towards our stated objective of achieving universal access to high quality health care services for all citizens. The Committees made various recommendations, but all three shared one common

[8] Medical schemes, like retirement funds, belong to their members and are operated by a board of trustees on a not-for-profit basis. Half of the board of trustees must be elected by members. Some schemes do their own administration but most make use of third-party administrators and managed care companies which are for-profit entities and may be listed companies. There is often confusion in consumers' minds between the medical scheme and the associated listed company.

[9] In social security, Pillar 1 is a universal benefit available to all citizens and is usually funded by tax revenue. Pillar 2 is a mandatory contributory system and Pillar 3 is voluntary additional benefits above the common benefits provided in Pillar 2.

[10] Voluntary insurance operates on 'mutuality' principles where members are assessed on application and pay according to their risk. Social systems operate on 'solidarity' principles where contributions are not linked to risk. Contributions may be paid equally (as under community rating) or according to ability to pay. Solidarity, when fully implemented, requires that contributions are mandatory for all above a certain income.

> proposal: they proposed that we should move towards mandatory contributions for all citizens, be it national or social health insurance.[12]
>
> The challenge for the department in interpreting the proposals was to ensure appropriate phasing of the reforms so as to prevent unexpected shocks on the system that could have unforeseen consequences. … All of us recognised the need for certain key issues to be addressed in order for mandatory cover to be feasible: we all understood the need to improve our regulation of the private sector to control the cost escalation and ensure affordability of mandatory contributions. We had to ensure that risk-rating would not continue to undermine access for the most vulnerable groups. We also had to ensure that there was an appropriate and affordable provider environment that could be reasonably accessed by all contributors. We always held the view that the enactment of the Medical Schemes Act would be a pre-cursor to the implementation of a mandatory environment.

The Taylor Committee in 2002 had outlined four phases of reform leading through Social Health Insurance to the ultimate goal of a National Health Insurance system. The not-for-profit medical schemes would be transformed as the vehicles for the pooling of funds and purchasing of care for their members under a mandatory Social Health system.

The Medical Schemes Act of 1998, and its accompanying Regulations, was introduced as a cornerstone to govern regulation of the private healthcare industry. The reforms implemented with effect from 1 January 2000 included:

- The reversal of the risk rating that had come to characterize the sector, and the re-introduction of **community rating**.[13]
- The introduction of **open enrolment**,[14] to improve access to medical schemes for people who were previously excluded.
- Solvency supervision and other financial and governance requirements were introduced to improve financial management and governance of schemes.
- The re-introduction of a minimum package of benefits as the **Prescribed Minimum Benefit** (PMB) package. PMBs[15] must be provided in full by all schemes, with no limits or co-payments by members.

Prescribed Minimum Benefits are important as the definition in the private sector of the minimum package of healthcare that must be made available to all citizens. The Taylor Committee recommended a policy process whereby the PMBs and the norms and standards of the public sector are harmonized to form the basic Pillar 1 entitlement. The major area where the PMBs and public-sector priorities are out of line is on the question of the inclusion of primary healthcare. It has been widely acknowledged that PMBs need to be expanded to include more primary care.

The Minister of Health has repeatedly said that there are three further reforms needed to achieve a system of **Social Health Insurance**. These are:

- The introduction of **risk-adjusted cross-subsidies**.[16] This will effectively enforce community rating across all medical schemes so that everyone is charged the same standard rate for the common PMB package, regardless of the option or scheme they choose to join. This will be accomplished through a central Risk Equalization Fund. South Africa is unusual in having open enrolment, community rating and minimum benefits without risk equalization at present. The International Review Panel that reported in 2004[17] argued that the introduction of risk equalization was urgent.
- The introduction of **income-based cross-subsidies**.[18] This de-links the purchase of healthcare from family affordability concerns. It enforces the primary solidarity mechanism under which people receive a common package of benefits according to healthcare needs and contribute to healthcare on the basis of their ability to pay.
- The creation of a mandatory environment. People earning above a certain amount would be required to contribute to mandatory Pillar 2 health cover.

As with retirement reform it is envisaged that people would be free to contribute to voluntary healthcare arrangements above the minimum package. However, given that the current PMBs are still only about half of the total expenditure on benefits in medical schemes, there is likely to be more stringent regulation of the supplementary packages regarded as part of essential healthcare (and hence still Pillar 2 responsibility in other countries). Only voluntary care such as cosmetic treatment, new technology and expensive treatments beyond standard protocols might be regarded as Pillar 3 benefits. The International Panel identified a critical need to define and standardize benefit packages and hence make it simpler for consumers to compare medical schemes.

The Ministerial Task Team on Social Health Insurance (SHI) produced detailed proposals for the reforms needed to reach the interim stage of Social Health Insurance. The Task Team cautioned[19] that the World Health Organization (WHO) had found that long periods of transition were needed by many countries to reach universal cover. For example, it took 127 years in Germany, 118 years in Belgium and 79 years in Austria from the first SHI legislation until universal coverage was reached.

While the reforms discussed above are extensive, they do not address all the reforms required by the South African healthcare system. Old-style debates of ‘public vs. private’ or ‘tax-funded’ do not capture the range of policy options available and the

[11] Opening Address to the Consultative Forum on Risk Equalisation by Dr Ayanda Ntsaluba, Director-General, Department of Health. Midrand, 10 July 2003.

[12] Under Social Health Insurance, only those who contribute are entitled to benefits. Under National Health Insurance the same taxpayers contribute but all citizens are entitled to the same package of benefits.

[13] Underwriting and charging according to the risk of the individual or group is no longer allowed. Everyone must be charged the same standard rate, regardless of age or state of health. However, this currently applies to each benefit option in each medical scheme rather than the industry as a whole.

[14] All open schemes have to accept anyone who wants to become a member, at standard rates.

[15] The Prescribed Minimum-Benefit package is a list of some 270 diagnosis and treatment pairs (PMB-DTP) primarily offered in hospital (introduced 1 January 2000); all emergency medical conditions (clarified from 1 January 2003); diagnosis, treatment and medication according to therapeutic algorithms for 25 defined chronic conditions on the Chronic Disease List (PMB-CDL) (introduced 1 January 2004).

[16] Cross-subsidies from the healthy to the sick are a feature of all healthcare pooling. As healthcare needs increase with age, risk cross-subsidies also imply a cross-subsidy from young to old.

[17] Armstrong J., Deeble J., Dror D.M., Rice N., Thiede M., Van de Ven W.P.M.M. (2004) *The International Review Panel Report to the South African Risk Equalization Fund Task Group.* 16 February 2004.

[18] Cross-subsidies from high income to low income need to be distinguished from any difference in healthcare usage by income group. Low-income people may find healthcare more difficult to access due to transport, availability of practitioners and affordability of cash co-payments. High-income people typically consume more healthcare and so a contribution table where high-income people pay more could simply be a reflection of usage. An income cross-subsidy is a deliberate mechanism to link contributions to ability to pay.

[19] Ministerial Task Team on *Social Health Insurance (2005) Social Health Insurance Options: Financial and Fiscal Impact Assessment,* pp.15-16.

WHO argues that it is preferable to focus instead on the functions of the health system. There are four distinct functions in a health system: revenue collection, pooling, purchasing and healthcare delivery. Using this framework, the reforms above deal only with the way in which revenue is collected and pooled.

The full sequence of reforms to pooling and purchasing from the current situation to National Health Insurance is shown in Appendix A. The diagram below shows the South African health system after the introduction of the Risk Equalization Fund and income cross-subsidies.

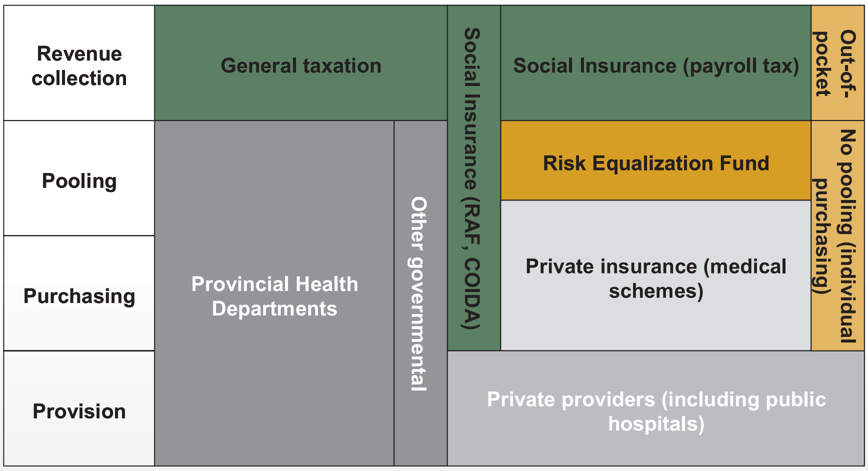

Figure 4: Functions of South African Health System under Social Health Insurance

(Ministerial Task Team on SHI, July 2005)[20]

Further reforms to purchasing and delivery of healthcare, however, are much needed and are on-going. The Director-General of Health said in 2003:[21]

> On the provider side, we remain concerned about the continuing high cost of cover, as a result of various systemic problems within the industry. One of these is the fee-for-service system, which encourages over-servicing and over-utilization. Although some schemes have introduced managed health care and other interventions to address this, alternative reimbursement mechanisms have not taken off.
>
> For our part, we recognise the need to establish the public hospital system as a contender for the provision of mandatory services under a contributory environment. The state of our public health facilities will remain one of our key focus areas for development in the medium to long term.

The Risk Equalization Fund (REF) is not only the vehicle for risk-adjusted cross-subsidies it is also the key institutional component needed for Social Health Insurance. Extensive work has been undertaken in conjunction with stakeholders on the establishment of the REF and its formula for operation. It is expected that the Risk Equalization Fund will have a major impact in reducing competition on the basis of risk-selection (choosing predominantly the young and healthy). Together with the standardization of benefits it will encourage competition on the cost-effective purchasing and delivery of healthcare. Draft legislation establishing the REF has been published for comment.[22]

2.2 Sequencing of Reforms

The Ministerial Task Team on SHI used the graph below to show steps needed to reach the two key policy objectives of introducing risk cross-subsidies and income cross-subsidies. This diagram will be used to identify the 'snapshots' needed at various periods in the reform for quantifying the impact on retired people.

The horizontal axis deals with the introduction of risk cross-subsidies. Prior to the Medical Schemes Act of 1998 (implemented in 2000) there was almost no cross-subsidy [point (1) below]. This is described as "**Period 1: 1993 to 2000: Before Reform**" in later analysis.

[20] RAF is the Road Accident Fund. COIDA is the legislation covering compensation for occupational injuries and diseases. Both are forms of social insurance as there is mandatory contribution and those who contribute receive benefits.

[21] Opening Address to the Consultative Forum on Risk Equalisation.

[22] Draft Medical Schemes Amendment Bill, 2007.

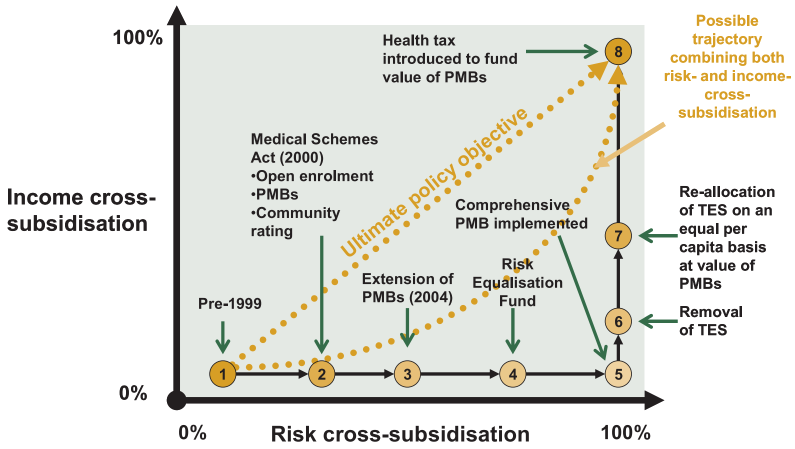

Figure 5: Policy Objective and Trajectory for Healthcare Financing Reform
(Ministerial Task Team on SHI, July 2005)

The introduction of open enrolment, community rating and Prescribed Minimum Benefits began to improve cross-subsidies from the healthy to the sick and from young to old. The extension of PMBs in 2004 to include treatment of chronic diseases solidified the cross-subsidies within options. Points (2) and (3) above are "**Period 2: 2000 to 2007: Medical Schemes Act**" in later analysis.

Risk cross-subsidies will be extended substantially when the Risk Equalization Fund is implemented. Reaching point (4) is described as "**Period 3: Isolated Risk Equalization Fund**". The sequencing of reforms does not require point (5) before progress is made on the vertical axis of income cross-subsidies. The flow of funds would not alter for extending the PMBs to a larger, more comprehensive package (including at least more primary care).

The first step towards introducing income cross-subsidies would be the removal of the existing tax expenditure subsidies which favour high-income earners [point (6)]. These cross-subsidies would be substantially extended by introducing a per capita subsidy instead [point (7)]. The snapshot at this stage is described as "**Period 4: Risk Equalization Fund with Per Capita Subsidy**".

The final step to the full implementation of Social Health Insurance would be point (8), where contributions in respect of PMBs are collected according to income in the form of a social security contribution. This is described as "**Period 5: Social Health Insurance**" in the sections that follow. The flow of funds to medical schemes would remain the same under National Health Insurance.

2.3 Flow of Funds under Social Health Insurance

The flow of funds in the healthcare system at each of the five snapshot points described above are given in Appendix B. The diagram below shows the final state at Period 5 and illustrates the key role of the Risk Equalization Fund in Social Health Insurance.

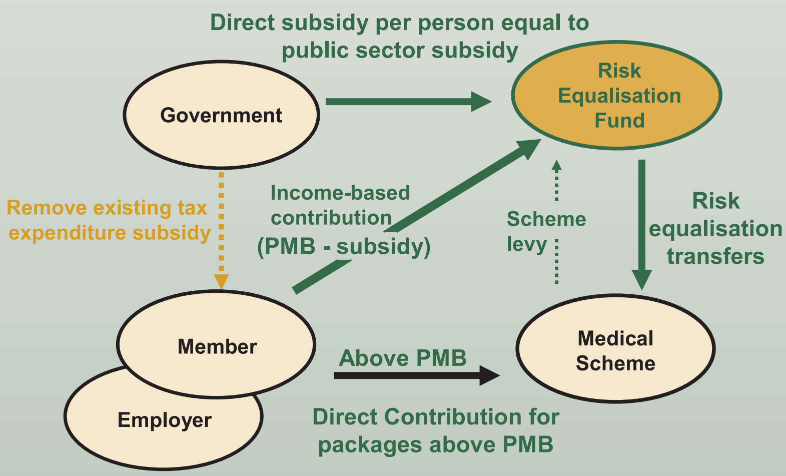

Figure 6: Flow of Funds in Period 5: Social Health Insurance

The Ministerial Task Team on SHI estimated that the tax-expenditure subsidy was R10.1 billion per annum. This subsidy of medical schemes for the nearly 7 million medical scheme beneficiaries is more per person than the government spends per person on people in the public sector. This is unfair and inequitable and thus needs to be removed and replaced with a more equitable subsidy for all citizens.

The intention is to equalize this Pillar 1 subsidy available to all, regardless of income, in the form of a fixed subsidy per beneficiary across the public and private sectors. This would mean the elimination of the tax-expenditure subsidy (TES) for medical scheme membership for individual taxpayers, to be replaced by the per capita universal subsidy available to all. The Ministerial Task Team estimated the amount of the per capita subsidy to be R1,196 per person per annum or R99.67 pm in 2005 Rand terms.

The provincial Departments of Health utilize this budgeted amount to deliver healthcare to those dependent on public-sector facilities. Medical scheme members and their dependants have their subsidy channelled via the Risk Equalization Fund to their chosen medical scheme. The medical schemes will use that subsidy towards buying the basic package of benefits, the PMBs, for their members. They will thus reduce the contributions members need to pay directly to their schemes.

The impact of moving from a tax-based subsidy for medical schemes to a per capita subsidy has the greatest effect on low-income workers earning below the tax threshold. With the tax-based subsidy these workers get no benefit if they join a medical scheme. Few are able to do so because the packages available may be as high as 35-40% of monthly income. The per capita subsidy halves this so that the net cost to the worker is some 20% of income. Although this is still high it does ensure that healthcare becomes more affordable for a substantially greater number of workers.

The Risk Equalization Fund pays risk-adjusted amounts to each medical scheme. The formula determined for the REF[23,24] is published in the form of a table and uses the following risk factors:

- Age, summarized into the age bands Under 1, 1-4, 5-9, 10-14… 75-79, 80-84, 85+;
- Gender (recommended from 2007 but not implemented);
- The diagnosis and treatment of any of the 25 chronic conditions that must be covered under PMBs;
- The number of multiple chronic conditions. Allowance is made for 2, 3, and 4 or more simultaneous chronic conditions;
- The treatment of HIV/Aids, provided the beneficiary is receiving anti-retroviral therapy according to the PMB definition; and
- Maternity events.

With a per capita subsidy in place, it is expected that all medical schemes would receive money from the REF. In the absence of a per capita subsidy (Period 3 in the diagrams in Appendix B and analysis), some schemes would pay to the REF and others would receive money from the REF. This possible interim stage is not favoured by the International Review Panel or by stakeholders or the team that developed the REF formula. It will require substantial attention to cashflow issues and debt collection on a quarterly basis. The Period 4 diagram in Appendix B (REF with the per capita subsidy) would provide for greater industry stability and greater acceptance of the REF.

The final flow in the diagram above shows the introduction of an earmarked Social Health Insurance contribution for all those earning above a certain income. This SHI contribution would probably be collected by SARS and could form part of the broader social security contribution envisaged in the retirement reform proposals.

The amount needed for the SHI contribution is set, together with the universal subsidy, in order to provide the amount needed for PMBs. The Ministerial Task Team reported in 2005 that the amount needed would be 3.1% of income for the first phase of SHI (covering 10.5 million people). The contribution would be 4.1% of income for the second phase (covering 13.4 million people) when more low-income contributors are brought under the mandatory system.

The SHI contribution is not an additional tax over and above existing medical scheme contributions but rather substitutes for amounts that are currently paid directly to schemes by members. Direct contributions to medical schemes in total are reduced by the universal subsidy and the amounts collected from the SHI contribution so that PMBs are fully paid for if delivered efficiently by the scheme.

Medical schemes that cannot contract for the delivery of the PMB within that amount will need to charge an additional amount directly to their members. Members will thus have a much clearer understanding of the price of healthcare and the trade-offs of network availability, cost and quality. This in turn will place medical schemes under considerable pressure to contract with providers and to ensure efficient healthcare delivery.

Medical schemes will continue to charge directly for administration costs and amounts needed to maintain statutory solvency. However, as the amount paid to medical schemes now excludes the risk cost of PMBs, the additional charges levied become much more visible. This should encourage greater attention by consumers to finding schemes with low non-healthcare costs.

A member of a medical scheme who is not paying the SHI Contribution (for some reason is not registered with SARS) would need to make a higher direct contribution to the medical scheme to compensate the scheme for the loss of subsidy from the REF.

[23] McLeod H., Matisonn S., Fourie I., Grobler P., Mynhardt S. and Marx G., (2004) The Determination of the Formula for the Risk Equalisation Fund in South Africa. Prepared for the Risk Equalisation Fund Task Group on behalf of the Formula Consultative Task Team, January 2004.

[24] RETAP (2007) Methodology for the Determination of the Risk Equalisation Fund Contribution Table [Base 2005, Use 2007]. Recommendations by the Risk Equalisation Technical Advisory Panel to the Council for Medical Schemes. Recommendations Report No. 9. 17 April 2007.

3. The Cost of Healthcare

In order to determine the amount to be funded for post-retirement medical scheme contributions, we need to understand the factors determining healthcare contributions.

3.1 The Cost of Healthcare by Age

The fundamental principle underlying all healthcare financing is that the utilization and hence the cost of healthcare increases with age. This is illustrated below using the price of PMBs in medical schemes by age in 2007. While the same detail in not available for the cost of care in the public sector, the forces underlying the shape are the same and only the amount will differ.

The graph below shows that the cost of healthcare for children under age one is very high. This is due to the high hospital costs associated with a few premature babies and those with congenital disease. The lowest cost is found in the childhood years and is typically some 25%-30% of the cost for adults as a group.

The cost begins to rise from around age 20 due to people beginning to drive vehicles, young women giving birth, accidents and violence associated with alcohol and drug abuse. The price for maternity care has a very distinctive 'breast' shape and is shown separately in the graph above. In South African medical schemes there is an extraordinarily high usage of Caesarean sections for delivery (62% in 2005) and hence the cost of maternity is higher than in other parts of the world. In the graph above a 50% Caesarean section rate has been imposed for REF formula calculations.

The price of care begins to rise steeply from around age 40 as the impact of chronic diseases of lifestyle becomes apparent. Chronic disease is strongly related to age and multiple chronic conditions become more apparent later in life. In the graph below, the price for chronic conditions is split between hospital costs, medicine costs and related costs (visits and diagnostic tests). Note that the price of healthcare typically declines at the oldest ages. Those that survive to the oldest ages are typically healthier and interventions by doctors are not as aggressive at the oldest ages.

The cost of those with no chronic disease rises much less steeply with age. The REF formulation in 2007 allows the identification of those with chronic disease but 'not verified', in other words who are not receiving sufficient treatment to validate them as 'treated patients' and hence eligible for risk-adjusted payments. The costs associated with this group also rise with age. The impact of the costs of anti-retroviral treatment for HIV is shown separately as a thin brown slice in the diagram above.

The graph also illustrates the concept of community rating for healthcare. The line shows the Industry Community Rate expected for 2007 which is R257.05 per beneficiary per month. This is equivalent to R217.99 in 2005 Rand terms (the modelling of retirement reform begins from 2005 which is the latest demographic data).

In the absence of REF, each benefit option in each scheme is a different risk pool and will have its own community rate. The graph above should make it clear that anyone over age 45 is not desirable to a medical scheme as the person costs more than the industry rate. Thus if a scheme has more than the industry share of people over age 45, the community rate for that scheme will be higher than illustrated. Conversely, if the scheme can attract younger and healthier people, it will be able to publish a lower community rate. This is an important driver of competitive medical scheme behaviour and has resulted in competition to select young and health lives (known as 'risk-selection', 'cherry-picking' or 'cream-skimming').

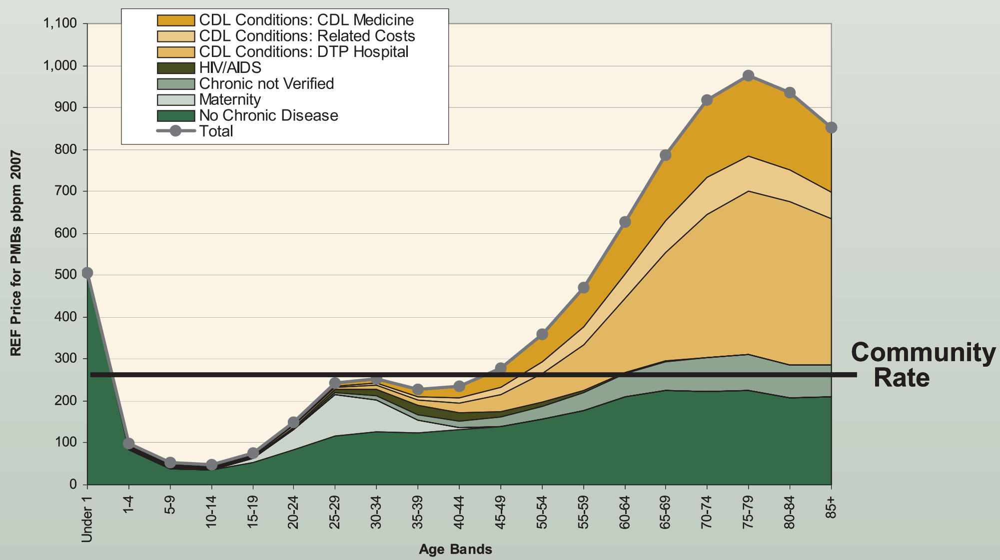

Figure 7: The Cost of Prescribed Minimum Benefits by Age in 2007 [25]

[25] CDL conditions are the 25 chronic conditions on the Chronic Disease List that must be covered as part of PMBs. CDL Medicine is medicine described in the therapeutic algorithms. DTP Hospital is the hospital events described in terms of diagnosis-treatment pairs.

The REF, by adjusting payments on the basis of the risk factors identified in section 2.3, should result in all beneficiaries facing close to the industry community rate for the common PMB package.

3.2 The Cost of Healthcare by Chronic Disease

The graph below illustrates the proportion of people by age with chronic disease and multiple chronic disease.

The graph illustrates why the cost of healthcare goes up so strongly with age – it is that more people are chronically ill at older ages. Some 65% of people over age 65 in medical schemes have one or more chronic diseases even if only some 50% are verified on regular treatment. The table below contrasts the cost of healthcare for those with no chronic disease and those with chronic disease validated as 'treated patients'.

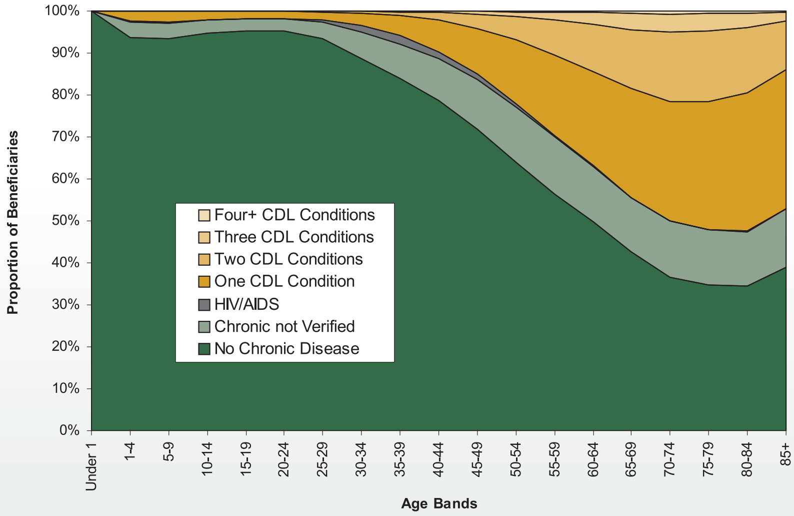

Figure 8: Proportion of Chronic and Multiple Chronic Disease by Age
Source: REF Contribution Table 2007

Table 1: Cost and Prevalence of Chronic Disease by Age Group

Age Group	Cost pbpm (2005 Rand terms)			Proportion with Treated Chronic Disease
	No Chronic Disease, incl. maternity	Treated Chronic Disease	All Beneficiaries	
Children under age 20	68.60	432.92	76.50	2.2%
Early Working Age 20-39	164.61	659.90	185.22	4.2%
Mid Working Age 40-59	155.48	601.70	213.45	13.0%
Late Working Age 60-64	260.76	729.64	393.89	28.4%
Retirement Age 65+	494.68	1,030.35	754.20	48.4%
All Ages in Medical Schemes	**150.17**	**763.50**	**217.99**	**11.1%**

The column "All Beneficiaries" shows the effect in each age group when there are cross-subsidies between healthy and those with chronic disease. The final line of the table shows the impact of cross-subsidies by age. When cross-subsidies by chronic disease and age are both considered, the overall industry community rate for medical schemes is R217.99 per beneficiary per month (pbpm) in 2005 terms.

The table above groups all chronic diseases together. However, in the absence of community rating in the period between 1993 and 2000 (Period 1 in the analysis), medical schemes were able to risk-rate individuals based on their age and state of health. In 2005 terms this would mean that an elderly male could have faced risk contributions (before administration and solvency loadings) as follows:

- Male age 75 pays R659 per month with no chronic disease;
- R924 pm with asthma;
- R1,038 pm Type 2 Diabetes;

- R1,382 pm with cardiac disease (ischaemic heart disease); and
- R14,400 pm with renal failure (if cover was available at all).

The table and examples above demonstrate that a major part of the solution to the problem of the high cost of healthcare for the elderly is the enforcement of community rating so that there are deliberate cross-subsidies between young and old and between healthy and those with chronic conditions. The re-introduction of community rating from January 2000 is thus an important tool to make healthcare affordable for the elderly.

3.3 Choice of Scheme and Option

Between 2000 and today (Period 2 in Appendix B and the analysis), community rating has operated in each benefit option offered by medical schemes. There were 398 options in medical schemes in 2006: thus there were 398 different risk pools and hence 398 different community rates in the market. This means that a person could still face very different healthcare costs for the same minimum benefit package, depending on the medical scheme and option chosen.

The scheme with the youngest age profile in June 2006 would have needed to charge only R141 pbpm for the PMBs compared to an industry community rate of R218 pbpm (amounts in 2005 terms, for comparison). However, the one with the oldest age profile would have needed to charge R714 pbpm for the same package of benefits, which is five times more than the youngest scheme. It was found from the REF data as at June 2006 that 80% of the 123 schemes needed community rates of between R173 and R310 pbpm (in 2005 terms).

Analysis of open medical schemes at option level shows that the public had 217 options to choose from, with the cost for PMBs ranging from R136.03 to R638.24 pbpm (4.7 times difference) based on age and gender differences between options. This difference for the same package of benefits is clearly inequitable and unfair to members and it is for this reason that the Risk Equalization Fund is being developed.

3.4 Choice of Benefit Package

A parallel area of reform needed is of the way in which medical schemes design benefit packages. The current PMBs represent only about half of the total expenditure on healthcare benefits by medical schemes. While the PMBs need to be extended over time, to do so now in a voluntary environment may result in young and healthy lives leaving the system and hence increasing the costs to those who need care.

Medical schemes are required to price each benefit package separately and can thus use benefit design to attract the young and healthy to one option while forcing the older and those with chronic conditions to choose more expensive packages. In one large scheme with 13 options the range was from R171 to R575 pbpm, a difference of R404 pm depending on which option was chosen. The scheme has clearly designed options that fragment the scheme risk pool.

Even with a common age and gender structure, benefit design will attract healthy people who use little care to one option and force those needing chronic care to higher-priced options. It is estimated that this difference may be from R217 pm for a plan offering no benefits outside of PMBs and other hospitalization, while a comprehensive package of hospital and primary care (typically needed by the elderly) might cost R354 pm, or roughly 60% more.

It has been suggested in a discussion paper by the Regulator[26] that future benefit design use a single common pool for PMBs and perhaps other common benefits. It is widely agreed that PMBs should form a common base pool and that supplementary benefits should be more tightly defined and standardized. The number of supplementary options needs to be restricted in order to facilitate comparisons by members. However, the sequencing of reforms with the REF is still subject to much debate and work is needed on the details of acceptable designs. Many argue that there needs to be simultaneous reform to remove the tax subsidy and replace it with per capita subsidy so as not to worsen the affordability for low-income workers.

3.5 Other Factors Impacting Contributions

The structure of medical scheme contribution rates into separate rates for adults and children is also a concern for the elderly. Although schemes can no longer age-rate, they are permitted to design tables with child and adult rates. Although this favours large families and is essential in a voluntary environment, it does increase the cost of healthcare for working adults and the elderly. If the industry PMB community rate is R217.99 pm, then the child rate would be R76.50, which raises the rate for adults to R291.26 pm. Thus while the child rate is 35% of the industry rate, that for adults is 134% of the industry rate, a difference between adult and child of 3.8 times.

The price for adults is very dependent on the number of children in medical schemes. In recent years the number of covered children in covered households has declined as parents deal with affordability issues by covering fewer children on medical schemes. This phenomenon has increased the price for all adults, including the elderly.

The analysis thus far has dealt with the true risk cost of benefits. The actual contribution paid by a member will also depend on the solvency of the medical scheme chosen and the schemes ability to manage the costs of administration and healthcare delivery. The solvency of all medical schemes has improved substantially since 2000 and charging higher contributions to reach minimum solvency is less of an issue than some years ago.

There are substantial differences between schemes in administration and marketing costs, with restricted membership schemes having the lowest costs. The Registrar of Medical Schemes has taken a tough line on excessive costs in open

[26] Circular 8 of 2006 from Council for Medical Schemes, 15 February 2006.

schemes but there have been substantial increases in cost levels since the mid-1990s. This is not an element for risk equalization and members need to be encouraged to consider the non-healthcare costs of a scheme in choosing their healthcare cover.

Theoretically there should be a substantial decline in the cost of healthcare if that care is actively purchased and the healthcare providers share in the risk, as for instance under managed-care arrangements. The public sector is more familiar with this style of purchasing where annual budgets are set and providers receive a fixed amount per annum to care for a particular number of patients. Managed care in the private sector in South Africa has been less successful than suggested by evidence in other markets because medical schemes have struggled to negotiate for more efficient delivery and risk-sharing with healthcare providers. The benefit of any more efficient healthcare delivery should be for the member, and again members should be encouraged to purchase care from more efficient medical schemes.

3.6 Impact of Mandatory Membership

The most important reform needed to lower the price of healthcare to members of medical schemes is to move away from the voluntary environment to a mandatory system of healthcare. In a voluntary environment there will be anti-selection by members so that people join schemes when they need care, despite the imposition of waiting periods and late-joiner penalties. Evidence of this anti-selection is provided in Appendix C.

The graph below shows the impact on the price of PMBs of moving from the current medical scheme membership to include sequentially more people and people in their households (HH), moving from left to right.

The first effect illustrated above is the impact of different age and gender profiles. This is 'hard' data from the population profile from StatsSA, with information from the General Household Survey 2005 and data from the Risk Equalization Fund. We can thus be reasonably certain that at least this impact will occur as more people are covered under Social Health Insurance. If SHI covers all people in households where someone is earning above the tax threshold, then the price of PMBs falls from R217.99 to R203.08 pbpm (93.2% of voluntary market level).

We know that more women of child-bearing years have entered medical schemes than would be expected in the SHI population (illustrated in appendix C). Thus a large proportion of SHI maternity costs are probably already being covered in medical schemes. Similarly, in REF data we can see bulges in disease profiles at childhood and young adult ages (not illustrated) that imply that those with chronic disease are already more likely to be on medical schemes. The second effect shown in the graph above takes into account age and gender changes, as well as some reduction in maternity and chronic disease rates. This is more speculative but could lead to PMBs being of the order of R178.14 pm instead of R203.08 pm for households of people above the tax threshold. This is a reduction to 81.7% of the voluntary PMB price.

If SHI were to extend to the households of people earning over R2,000 pm, then many younger people would be drawn in and the price for PMBs could fall to R174.42 pm. If the income level is R1,000 pm then the price of PMBs could be R170.68 pm or 78.3% of the voluntary levels.

Another way to look at this phenomenon is that prices of PMBs in the voluntary environment are between 22.4% and 27.7% more expensive in the voluntary environment than they could be at various stages of the coverage of Social Health Insurance.

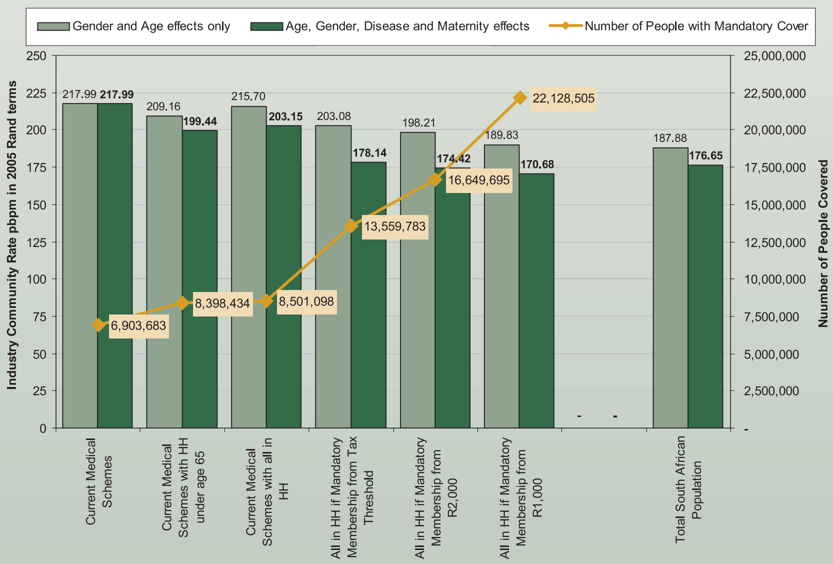

Figure 9: Price of PMBs under Degrees of Mandatory Membership (pbpm 2005 Rand)

3.7 Mitigating the Cost of Healthcare for the Elderly

The essence of the problem identified in section 1.2 is that healthcare costs rise at exactly the time that income reduces, resulting in an affordability 'crunch' for those in retirement. Societies have a number of ways of dealing with this problem and South Africa has already implemented many of these, as discussed below:

- Healthcare funders act as agents to **pool contributions** to prevent family insolvency from expensive health events that no family could deal with alone. This is the key reason for having health insurance in society. Medical schemes play this pooling role for private-sector healthcare in South Africa and the Risk Equalization Fund will pool risk across medical schemes. Provincial governments perform this pooling role for public-sector care in each province and National Treasury acts to allocate funds between provinces based on risk and need.
- Healthcare funders are required to practise **open enrolment**: in other words, anyone may join a fund and may not be rejected because of their age or state of health or any other risk factor. In a voluntary environment people will tend to join health funders only when they have healthcare needs and so protections for the funds are instituted such as waiting periods and restrictions on pre-existing conditions. Late-joiner penalties may be applied to discourage people from staying out of the collective funding system. South Africa has implemented all these mechanisms in the voluntary medical schemes environment. These mechanisms would not be necessary in a mandatory environment.
- **Life-time cover** is required to ensure that people are not forced to leave healthcare funds as their health deteriorates. Medical schemes are required to continue to renew cover and people may remain on their chosen medical scheme in retirement or may move to another scheme.
- Healthcare funders are required to practise **community rating** so that they charge the same contribution (or premium) regardless of age or state of health. Given that healthcare costs increase so strongly with age, this is the prime mechanism for making healthcare affordable for the elderly. This has been implemented at option level in medical schemes and will be implemented across all medical schemes once the Risk Equalization Fund becomes operational.
- If competitive healthcare funders are not restricted in benefit design, they may develop so called 'Swiss-cheese' product offerings which are not attractive to the elderly and those with chronic disease. For example, hip replacements may not be readily available or medicine for chronic conditions may be restricted. Ensuring that all healthcare funders provide a socially agreed set of **minimum benefits** can ensure that the elderly are not disadvantaged.
- Open enrolment, community rating and minimum benefits on their own are insufficient to prevent competitive health funds from 'cream-skimming', 'cherry-picking' and risk-rating, in other words preferring young and healthy lives. **Risk equalization** is needed to ensure that the schemes with older members and those with chronic disease are not disadvantaged. South Africa is in the process of implementing the Risk Equalization Fund between medical schemes.
- **Mandatory membership** of healthcare funds for all those earning above a certain level would ensure that more people are covered while working and into retirement. It has also been demonstrated how mandatory membership reduces the cost of benefits by spreading risk over a wider group of people and ensuring that the young and healthy are part of the risk pool.
- Even with all of the measures above, healthcare affordability problems in retirement can still be an obstacle for the elderly. Incomes in retirement are lower than while people are working and hence the relative affordability of medical schemes becomes worse.
- A private way to deal with the income issue is that there may be **subsidies from the employer** for healthcare, as discussed in the next section.
- The income problem can be effectively dealt with by introducing **income cross-subsidies**. This could occur at the level of individual medical schemes (explored in section 4.4) or for the industry as a whole as envisaged under Social Health Insurance (section 5).
- There may be deliberate **pre-funding for healthcare contributions in retirement** – the subject of this report.

4. Employer Subsidies of Medical Schemes

This section explores the role played by employers in subsidizing healthcare, firstly for existing employees and then for those in retirement. The dramatic changes in employer subsidy policy in South Africa in recent years are highlighted and the reasons for the changes outlined.

4.1 Subsidies during Employment

In the absence of a mandated social security system for healthcare, there is a range of positions an employer can choose to adopt with regard to funding healthcare. These range from[27] "seeing healthcare as an aggravating and potentially ruinous cost of doing business" to being "an investment in business success" where "healthy people deliver healthy profits".

Companies that choose the former position might meet legislated occupational health standards, provide a fixed subsidy for healthcare to all workers and then not involve themselves further in healthcare issues. Companies that choose the latter position seek to invest in employee healthcare in order to improve worker performance and satisfaction. They might become active purchasers of healthcare and seek to integrate all company health-related initiatives.

There are many factors that have conspired to change the way employers consider healthcare. In the 1970s it was typical for higher-income employees to be offered a cash package with

[27] Berry L.L., Mirabito A.M. and Berwick, D.M. (2004) A Health Care Agenda for Business, *MIT Sloan Management Review*, Summer 2004, Vol. 45 No. 4.

employment benefits above that level, including housing subsidy, car loan, a retirement fund and medical scheme membership. The decades of the 1980s and 1990s saw a much greater focus on employment equity and paying employees the same for the same work. Packages became costed so that a total cost to company would be quoted with each employee determining the degree to which they would take up various benefits. Employers might mandate minimum levels of risk cover, retirement and medical cover but allow employees to flexibly determine the usage of these benefits above the minimum level. Lower-income workers rarely had access to this degree of flexibility but the same principle of total cost of employment was entrenched in wage negotiations and negotiations around benefits.

The Old Mutual Survey in 2003[28] documented how employers have engineered "a fairly constant employer cost of healthcare over the past 10 years (as a percentage of payroll)." This has been achieved by increasingly passing the risk of escalation in healthcare costs to employees. In recent years many employers have moved to fixing the medical scheme subsidy as Rand amount or in terms of subsidizing only a basic set of benefits. The Old Mutual report says: "We see that only 41% of employers now pay a percentage of contribution with no limit. A further 18% do so with a limit. This compares to the 75% reported in 1999 [paying a fixed percentage of contributions]. Much of this movement is due to the fact that 21% of employers now surveyed have capped their healthcare costs by shifting the total employer subsidy to the cash package of the employee. Once again this illustrates how employees continue to bear the brunt of the increase in the cost of healthcare".

The Old Mutual Survey in 2005[29] found "what many employers are experiencing now is that even though they provide a subsidy to all employees, many individuals are not able to make use of this because it is too small in relation to the total contribution. Thus the need to cap the employer subsidy has resulted in a significant percentage of the workforce buying down into cheaper options, deregistering some of their dependants or being unable to continue to afford medical scheme cover." The Survey found that the average employer subsidy was R883 per employee per month but a very wide variation was observed.

4.2 Subsidies in Retirement

It is in the area of subsidies in retirement that the greatest change in employer policy has occurred. A major environmental influence on changing employer attitudes has been the trend to much shorter periods of employment and having multiple employers (and perhaps careers) over a life-time of work. The idea that a worker joined the company at 18 and retired from the same company, as happened with those born in the early 1900s, is no longer valid.

However, the spur to action by employer financial directors has brought changes in the accounting treatment of costs for retired workers. Thirty years ago these may simply have been expensed each year, but beginning in the 1980s there has been a world-wide movement in accounting circles to account for costs in retirement during the working life of the employee. In principle, a company must account for any promises in retirement while a worker is still employed. This requires additional expenditure to be recorded on the income statement and additional liabilities to be placed on the balance sheet.

The currently applicable standard for South African companies is International Accounting Standard 19 on Employee Benefits (IAS19).[30] This incorporates accounting for retirement funds and post-employment benefits from a company perspective. The standard was previously known as AC116 and all South African companies, whether listed or otherwise, have been required to comply with AC116 since 1 January 2001.

The box below gives a brief overview of how international accounting standards have increasingly become applied to South African companies.

International Accounting Standards and South Africa

Globally there will be two reporting platforms, namely US GAAP and IFRS. Numerous countries, including the EU, Australia and South Africa are adopting the International Financial Reporting Standards (IFRS) as the platform to which they will conform.

The South African statements of Generally Accepted Accounting Practice (GAAP) are the standards issued by the South African Institute of Chartered Accountants (SAICA). Since the 1990's South Africa has harmonised and aligned its standards with those of the International Accounting Standards Board (IASB). In terms of a resolution taken by SAICA in 2004, all new South African standards will be exactly in line with the IFRS standards issued by IASB.

For financial years starting on or after 1 January 2005, South African listed companies are required to prepare their consolidated financial statements in accordance with IFRS. Adoption of IFRS by other South African companies is voluntary, however the SA GAAP standards that they will apply in future will be those issued by the IASB.

IFRS aims to increase the consistency of financial reporting and enable greater comparability of companies across countries. Therefore it will be easier for SA companies to benchmark themselves against their international competitors and provide adequate credibility to their financial statements.

(Source: Ernst and Young, "SA Statement of GAAP 2005" and "What's All this About IFRS?")

[28] Old Mutual (2003) *Old Mutual 2003 Healthcare Survey:* A Decade of Change.
[29] Old Mutual (2005) *Old Mutual 2005 Healthcare Survey:* Towards Social Health Insurance.
[30] This is also known as IFRS19, the International Financial Reporting Standard 19: Employee Benefits.

Since 1994 the Old Mutual Surveys have documented "the trend towards excluding pensioners from company funding for healthcare".[31] In 1995 89% of companies surveyed were providing funding of health benefits for pensioners, falling to 43% of companies in 2003 and with "only 29% of respondents indicating that they currently offer some form of post-retirement subsidy in 2005".

The two graphs below illustrate the predominant strategies used by employers for existing pensioners and for future pensioners.

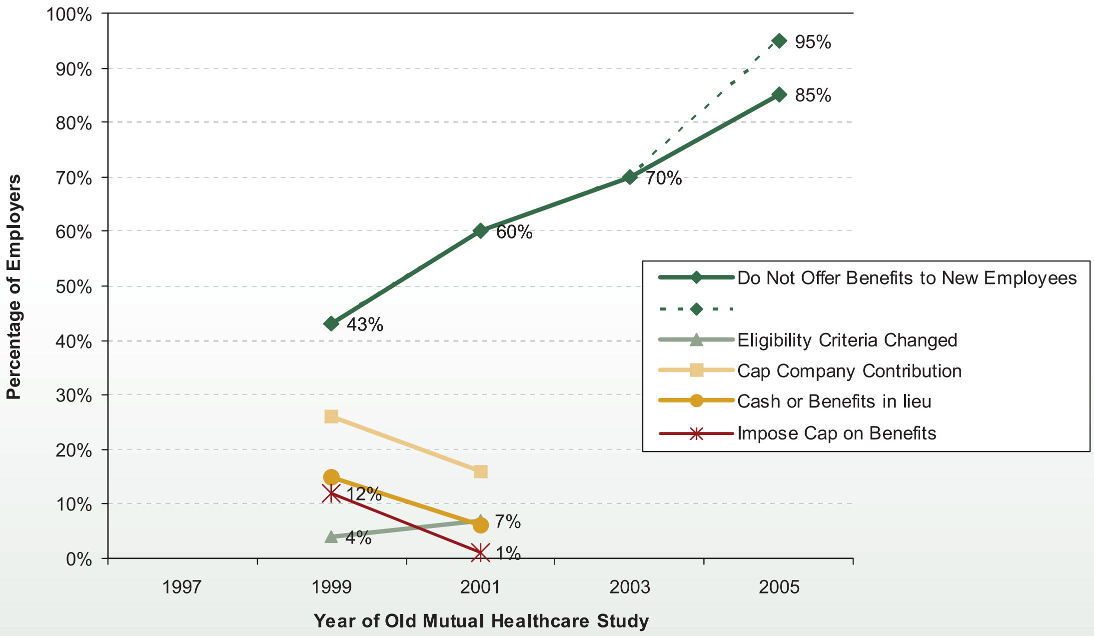

Figure 10: Employer Philosophy for Current Pensioners
(Source: Old Mutual Healthcare Surveys 1997 to 2005)

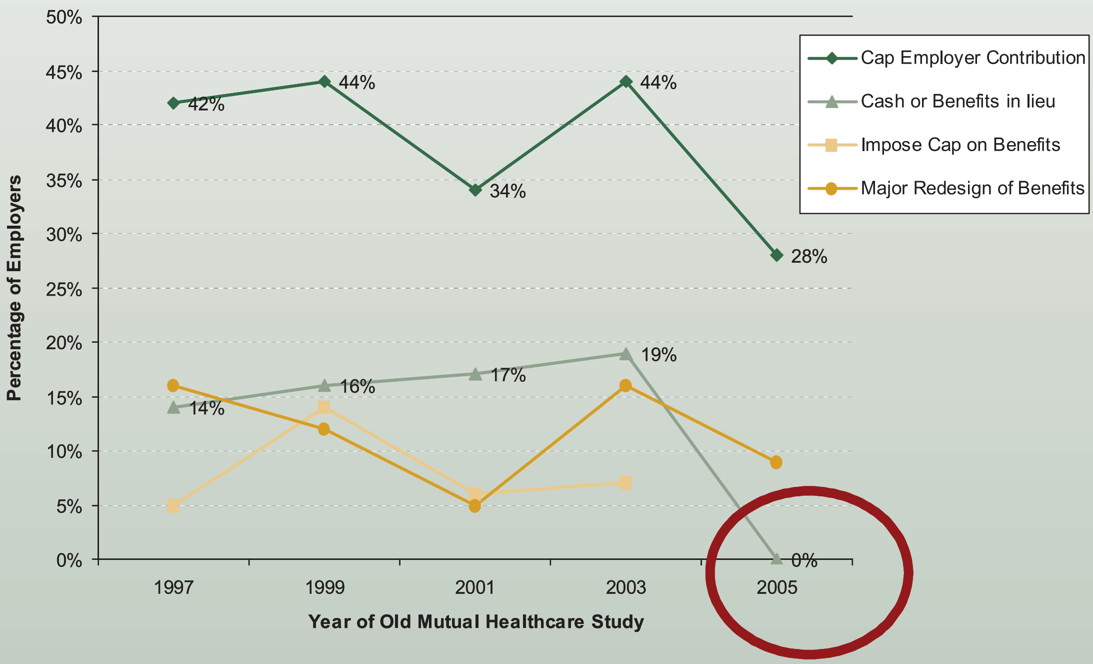

Figure 11: Employer Philosophy for Future Pensioners
(Source: Old Mutual Healthcare Surveys 1997 to 2005)

[31] Old Mutual (2005) *Old Mutual 2005 Healthcare Survey: towards Social Health Insurance.*

Old Mutual found that employers had employed the following strategies to deal with the additional liability imposed by the accounting standards:

- Excluding healthcare benefits in retirement from the employment contracts of all new employees;
- Capping employer contributions for all future as well as existing pensioners;
- Offering cash or other benefits in lieu of continuing to cover the liability of post-retirement medical scheme contributions; and
- Re-designing the medical scheme benefit structure or imposing limitations on benefits.

The strategy of giving extra cash or benefits in retirement in lieu of medical scheme subsidies for existing pensioners ran into significant legal challenges between 2003 and 2005 and hence no employers indicated using this strategy in the 2005 Survey. However, this approach had already run a substantial, and disastrous, course in South Africa (see section 4.3).

The second graph above shows how from 1997 onwards employers moved swiftly to change contracts of employment. The people responsible for the Survey at Old Mutual indicated that the percentage of companies not offering healthcare subsidies in retirement to new employees was probably between 85% and 95% in 2005 (the dotted line on the graph).

One of the firms of actuaries and consultants that assisted employers to make this rapid change in employment practice was Alexander Forbes. It is thus instructive to consider that firm as a case study of what has happened to employees, as shown in the box below.

Case Study: Alexander Forbes Limited

Post-retirement medical benefit obligation – South Africa

In South Africa, certain employees who joined the group prior to 1 March 1997, are entitled to a post-retirement medical aid subsidy. At 31 March 2006, this applies to a total of 464 people (2005: 465) and comprises 175 active employees (2005: 183) and 289 pensioners (2005: 282). Employees who joined the group **after 1 March 1997** are not eligible for post-retirement medical aid subsidies.

Substantially all employees are covered by **defined contribution** retirement fund arrangements in the major regions in which the group operates. The group also has defined benefit pension funds in South Africa and the United Kingdom which are closed to new entrants…. At 31 March 2006, the fund (in South Africa) had 96 (2005: 112) active members and 190 (2005: 194) pensioners.

(Source: Alexander Forbes Limited Annual Report 2006, p119 and 120)

As Alexander Forbes had 3,199 employees in South Africa in 2006, only 5.5% of those employees will have any medical scheme subsidy when they retire. The situation at Alexander Forbes is an extreme example of getting rid of the post-retirement liability and the proportion of existing employees who can expect cover in retirement is said to be of the order of 30% in large financial services companies.

The drive to reduce the impact of healthcare subsidies on the company balance sheet typically has a feedback loop to the way in which subsidies are organized for workers, as can be seen in the Transnet case study below.

Case Study: Transnet

Transnet subsidises members at a flat contribution of R800 per month per member.

The medical inflation has no impact on the aggregate current service cost and interest cost and the benefit liability.

(Source: Notes to the Annual Financial Statements in the Transnet Annual Report 2006)

Employers have thus been remarkably successful at reducing the risk of healthcare inflation to themselves and ensuring that workers and pensioners carry that risk. This was accomplished with almost no response from unions, who in many cases welcomed the move from defined benefit to defined contribution retirement schemes that accompanied this change in employment conditions. However, Professor Slattery of the University of Stellenbosch cautions as follows:[32]

The demise of defined benefit funds in favour of defined contribution funds (and the resulting handing over of the risk of poor future investment returns to employees) is likely to produce many headaches in the future. When scheme members reach

[32] Slattery P.G. (2004) Actuarial Professional Evolution – Adapt or Die. Presented at Actuarial Society of South Africa Conference 2004.

retirement and realise, as will be the case for many retirees, that they would have been much better off with their old defined benefit arrangement, we (actuaries) may have some awkward questions to answer.

4.3 Misuse of Pension Fund Surplus

The Actuarial Society of South Africa, in an explanatory pamphlet written for the public,[33] explains that:

> Some employers would prefer to eliminate, reduce or, at least, cap the associated open-ended liabilities they face due to their agreement to subsidise the post-retirement medical costs of their employees. Such an employer may offer his or her employees, or former employees, some alternative form of compensation in exchange for the current retirement subsidy promise.
>
> This alternative compensation may, for example, be in the form of a salary increase or additional retirement funding contributions (for members still in-service), a cash lump sum, or an insurance policy. In industry terms, such an agreement between the employer and the employee is known as a 'buy-out', and the amount of financial compensation offered by the employer to cover this buyout from its post-retirement medical subsidy liability may be calculated by an actuary.

While the 'buy-out' of post-retirement medical scheme liabilities became common practice in the South African industry after 1997, senior actuarial voices are now being heard about the dangers of this practice. Reporting in the *Mail&Guardian*,[34] Mayer Fischer-French quotes Mike Codron of the Financial Services Board:

> The main misuse of surplus funds had to do with medical aid contributions. Previously, employers would agree to continue medical aid obligations for certain employees after their retirement. As medical costs escalated and the number of employees for which they were paying medical aid grew, they offered the employees a portion of the surplus fund to effectively 'buy' the company out of its obligation. As the medical aid arrangement was between the employer and employee, the pension fund should not have been used for this purpose.

The legislation dealing with the use of surplus in pension funds has been effective since December 2001. Many of the cases brought before the Appeal Board of the Financial Services Board deal with issues related to the use of surplus by employers and the aftermath of the activities by employers since 1997 may take many years to unfold.

The full effect of transferring investment risk and medical inflation risk to the elderly and future retirees will also take same years to unfold. In 2002, McLeod, Mubangizi, Rothberg and Fish[35] described the subsidy issue as "a future time bomb", saying:

> This issue is a potential affordability time bomb that will impact the industry when those joining companies from around the year 2000 onwards reach retirement age. This could be some 15 years to 35 years into the future, but if this practice does not receive serious policy attention now, the impact on affordability of medical schemes for those future pensioners can only be described as devastating.

4.4 Income Cross-subsidies in Medical Schemes

Although not technically an employer subsidy, the employer can guide a restricted medical scheme to create income cross-subsidies within the scheme itself. Restricted medical schemes are typically employer-based but may also be union-based or developed by any other defined group such as a profession, sport, educational facility or church.

This 'social engineering' of contributions is usually deliberate and agreed by all groups covered by the scheme. For example, the trustees may deliberately set contributions so that single elderly people (typically widows, as women live longer than men), pay only perhaps R20.00 per person per month. Contributions for other groups (employed or high-income bands) are then adjusted upwards to provide the total needed by the scheme.

There are no restrictions on the degree of 'social engineering' within a restricted medical scheme. The same practice cannot be used in open medical schemes (where anyone can join), because in a competitive voluntary environment working people can choose another scheme that does not enforce a higher contribution.

Some open schemes have experimented unsuccessfully in the past with income-banding.[36] Products designed to attract low-income (and often low-claiming) workers also attract low-income pensioners (with high claims). Open schemes thus generally charge by number of dependants or adult-child rates but not by income.

The graph below shows that in the early 1990s the number of members in open and restricted schemes was approximately equal, but has since strongly diverged. Since brokers began to operate in the market they have aggressively moved people to open schemes, often leaving the older members behind in a closed restricted scheme. Although movement out of restricted schemes has slowed, open schemes covered 69.6% of beneficiaries by 2005.

Brokers in medical schemes were only legalized in 2000 and 5,867 brokers had received accreditation by December 2002. In recent years broker fees paid by open schemes have been accelerating, resulting in increases in broker fees now far exceeding increases in the number of members.[37] The Registrar of Medical Schemes is rightly worried about this problem. It is instructive to reflect that by end 2005 there were 9,425 individual health brokers accredited with the Council for Medical Schemes. The number of general practitioners is estimated to be of the order of only some 7,000 individual doctors.

[33] Janina Slawski, President of the Actuarial Society of SA in ASSA'ndaba No. 4 October 2005, *Medical Subsidies after Retirement: explaining post-retirement medical buy-outs.*

[34] Maya Fisher-French in the *Mail&Guardian*, 14 February 2007, "Old Mutual debates R80m surplus."

[35] McLeod H.D., Mubangizi D.B., Rothberg A. and Fish T. (2003). *The Impact of Prescribed Minimum Benefits on the Affordability of Contributions*. A Report prepared under contract for the Council for Medical Schemes, Pretoria, p. 67.

[36] The setting of contribution tables according to the income of members.

[37] Council for Medical Schemes Annual Report 2005-6.

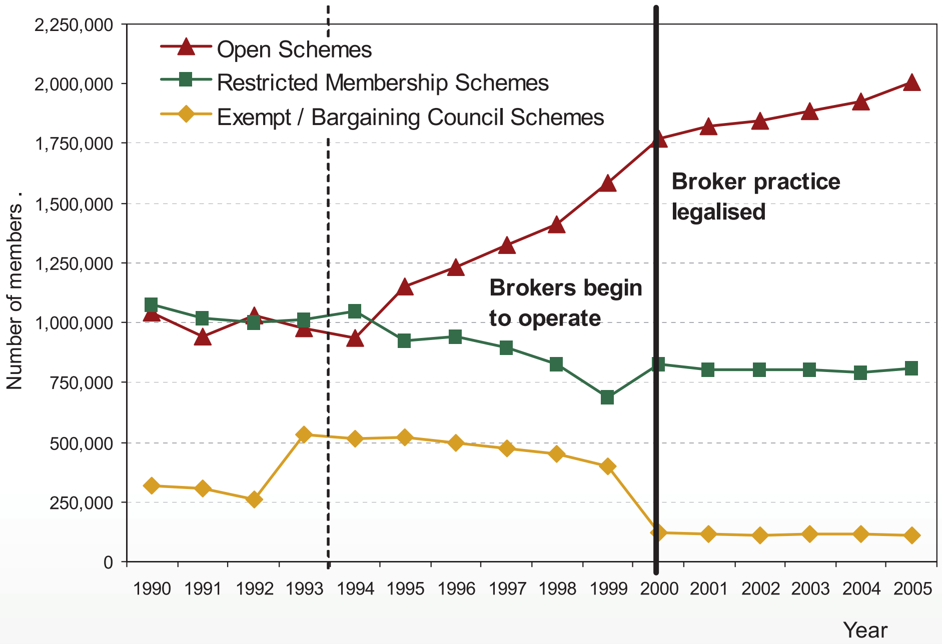

Figure 12: Membership of Open and Restricted Medical Schemes
(Source: Annual Reports of the Registrar of Medical Schemes)

One positive development has been the return by government to a restricted scheme for public-sector workers. During the 1990s public-sector workers were allocated an employer subsidy for medical schemes but could use this in any open medical scheme of their choice. The Government Employees Medical Scheme (GEMS) is a welcome return to a restricted membership scheme environment and may result in other employers re-considering their stance on this issue. It was reported in June 2007[38] that GEMS had reached 127,000 principal members or some 355,000 lives, making it the fourth-largest medical scheme in South Africa.

Even with public-sector workers returning to a restricted scheme, there are still substantial numbers of people in open medical schemes where it is difficult to create deliberate income cross-subsidies. The only possibility would be to mandate all schemes to create income cross-subsidies of a particular shape and to give schemes the information about income bands to charge from a central point. In essence that would create a medical scheme version of the envisaged income cross-subsidies under Social Health Insurance.

5. Social Security Contributions for Healthcare

This section explores the cost of providing for medical scheme contributions in a social security system. The direct cost to the members of medical schemes will vary as healthcare reform proceeds and this section has aims to clarify the cost at each period in the reform.

The initial analysis is performed using the One-Year Model developed for the Department of Social Development for the retirement reform project. A brief description and roadmap of the structure of the One-Year Model are given in Appendix D. As the retirement reform models are based on demographic and income data from StatsSA from 2005, the results in this section are all presented in 2005 Rand terms. The General Household Survey 2005 (GHS2005) from StatsSA was supplied by EPRI for this project. This was combined with mid-year population estimates from StatsSA and data from the Council for Medical Schemes.

5.1 Analysis of Contributors

The starting point for any modelling is to determine who may be contributors to social security and how much they earn.

Initial analysis of the GHS2005 reminds us of the positive aspects as well as the harsh reality of organizing mandatory social security in South Africa:

- Total population of 46.9 million people in 2005, of whom 20.1 million (42.8%) are children under the age of 20. There are 28.9 million (61.6%) under the age of 30.
- There were only 2.3 million people (5.0%) of the population over age 65 in 2005. This very young population structure makes for a very different set of challenges in South Africa compared to nations in Europe with ageing populations.
- 19.5% of people receive a social security grant of some form. The Social Old Age Pension (SOAP), Disability and Child Support are the major grants received.

[38] Medical Chronicle, June 2007, p. 3.

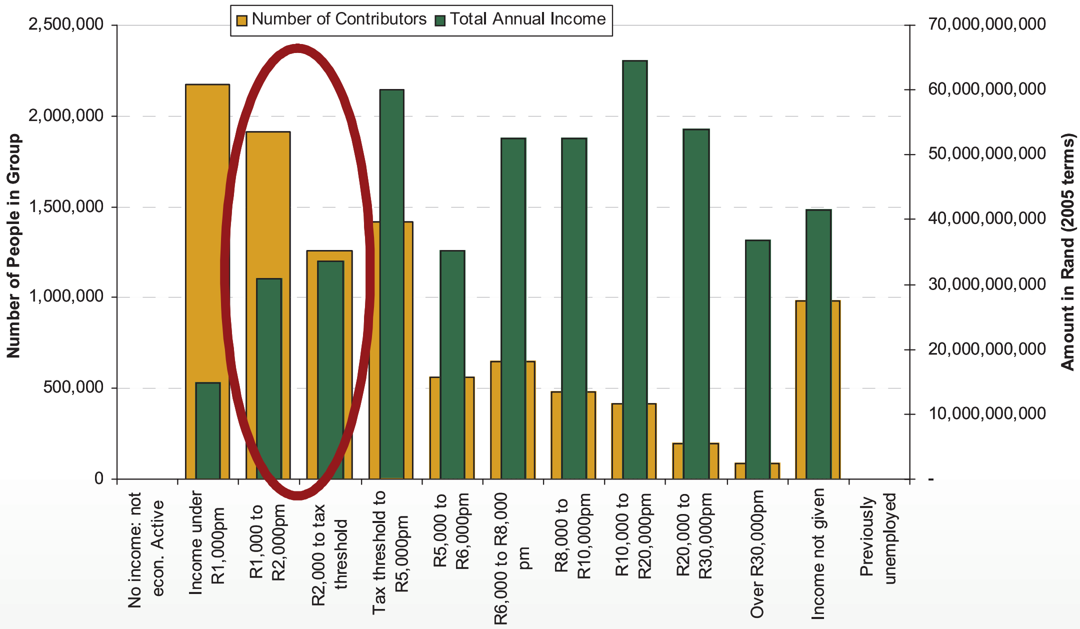

Figure 13: Identification of Contributors to Mandatory Social Security
(Source: GHS2005 and One-Year Model)

- 54.0% of people are in households receiving a social security grant. SOAP and Child Support have a major effect on the ability of households to survive (see Appendix F for graphs by age).
- 75.4% of the population do not earn any income and 40.3% live in a household where there is no one who earns an income (see Appendix E for graphs by age).
- 54.0% of the working age population (age 20 to 64) do not earn any income.

The graph above shows both the number of people and the total annual earnings in each income band. Note that while there are many people in South Africa with no income, they are also not potential contributors to social security.

The graph above illustrates that there are many more people at lower-income levels than at higher levels. Most income (and therefore contributions) will come from middle- and higher-income levels. Working in conjunction with the Department of Social Development and with Rob Rusconi, who developed the Long-Term Model for this retirement reform project, it was agreed these reports would use three scenarios for potential contributors to social security:

Scenario 1:

- Exclude 'Foreign', 'Household', Domestic and Farm Workers[39]
- Contribute if earning between ages 20 and 64. Contribute 15% of income, but only for income above the income threshold.
- Contribute if earning above tax threshold.
- This has 4.8 million contributors and annual contributions of R34.5 billion.

Scenario 2:

- As above, but contribute if earning above R2,000 per month.
- This has 6.0 million contributors and annual contributions of R42.8 billion.

Scenario 3:

- As above, but contribute if earning above R1,000 per month.
- This has 8.0 million contributors and annual contributions of R54.9 billion.

The bars in respect of additional people in Scenarios 2 and 3 are ringed in the graph above.

Note that this analysis using 15% of income above the income threshold for social security contributions is only a starting point. The next step in modelling is then to finalize what benefits are to be paid, to whom, and under what circumstances. We then balance benefits with required contributions while ensuring long-term financial soundness. Throughout, we continually assess affordability for lowest-income workers or ways to mitigate the impact on low-income earners. The wage subsidy proposed by National Treasury[40] is not developed in this model yet and needs to be the subject of further analysis as proposals are clarified.

[39] Further developments on the wage subsidy suggest that only 'Foreign' might be excluded.
[40] National Treasury (2007) Security and Retirement Reform: Second Discussion Paper.

5.2 Analysis of Pensioners

The graph below shows all males over age 65, women over age 60 (current ages for receipt of SOAP) as well as those below age 65 receiving either a pension or a disability grant. The graph covers 3.745 million people, of which 2.331 million are over age 65.

The GHS2005 does not identify private pensioners directly and income for pensioners is not completely captured. The Registrar of Pension Funds gave a figure of 1.1 million pensioners in 2004 but with a double-count where people belong to more than one fund.[41] In the graph above some of those answering 'no pension' could be in receipt of a pension from a private pension fund.

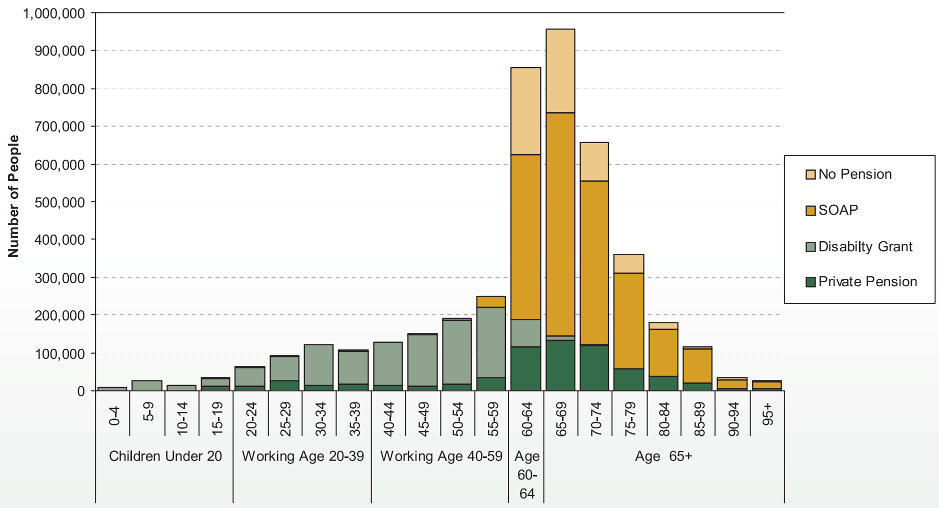

Figure 14: Current Pensioners by Age Band
(Source: GHS2005)

5.3 Membership of Medical Schemes

The patterns of medical scheme membership in the General Household Survey 2005 (GHS2005) are corroborated by data from the Council for Medical Schemes. Overall, 14.0% of the population are covered by medical schemes but this is strongly related to income, as shown in Figure 3, where higher-income groups have coverage of 70 to 80%.

The graph below illustrates medical scheme coverage by scenario and age. Individuals are grouped by the income of their household (HH) and then the status of membership within the household is presented. Those not on a medical scheme are split into two groups: those in a household where there is already someone on a medical scheme and those in households where there is no medical scheme cover at present.

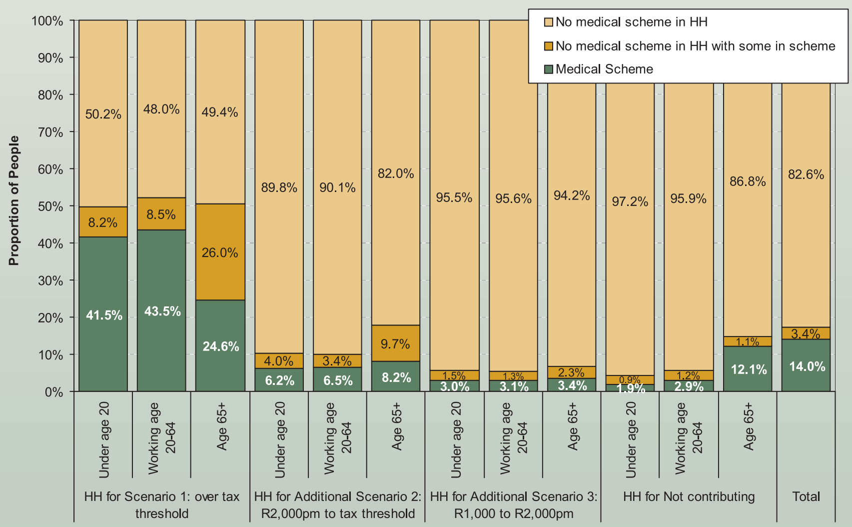

Figure 15: Proportion of People in Medical Schemes by Contributor Scenarios
(Source: GHS2005)

[41] Department of Social Development (2007). Reform of Retirement Provisions, p. 59.

The graph above shows the highest existing medical scheme coverage for Scenario 1, i.e. those earning above the tax threshold. The orange bars show that there are opportunities for medical schemes to redefine 'family' in order to encourage medical scheme coverage all members of the household. This is particularly evident in people in Scenario 1 households but over the age of 65, where medical scheme coverage is only 24.6% but a further 26.0% live in households where there is some medical scheme coverage. As groups are added under Scenarios 2 and 3, so the ability to afford current packages decreases sharply. There are large numbers of pensioners who are not living in the households of contributors.

5.4 Social Security Contribution for Health

We now have sufficient information to estimate the social security contribution required for healthcare under the three scenarios of mandatory coverage. The One-Year Model is used initially to set the contribution rate and to investigate the impact of covering the cost in full for those over age 65. This result is then included in the Long-Term Model to account for future changes in the demographics of the country.

The table overleaf shows the calculation of the required social security contribution for the three scenarios and takes a very conservative approach to the number of people who may be included as beneficiaries of medical schemes under Social Health Insurance. The approach is very conservative because we include as beneficiaries the total households of contributors whereas the current definition of 'family' tends to be only the spouse and children, rather than parents and siblings. The table thus overstates who may be beneficiaries of schemes.

Income data is not provided by everyone in GHS2005. Where people have stated only an income bracket, the mid-point of the range has been used. Where people have refused to indicate income, they have been allocated to the lowest category of income in Scenario 1, i.e. earning the average income of the first group above the tax threshold, or R3,537 per month. From answers to questions on education and other demographics, this is likely to understate income and thus adds to the overall estimate being considered very conservative.

It was found that the social security contribution needed to cover the full REF price of PMBs for contributors and everyone in their households under age 65 would be 3.0% for Scenario 1 (earning above the tax threshold), rising to 3.3% of income for Scenario 2 (earning above R2,000 pm) and 3.8% of income for Scenario 3 (earning above R1,000 per month).[42]

The One-Year Model has poor income data for people over age 65 but excellent demographic data. This provides an opportunity to test the impact of including all those on medical schemes over age 65 without them paying any social security contribution. Again a very conservative estimate was made by estimating the cost for covering all those over 65 in the households of anyone with some medical scheme cover. The cost across all scenarios was to add 0.1% to the social security contribution for healthcare. This gives a total social security contribution of 3.1% for Scenario 1, 3.4% for Scenario 2 and 3.9% for Scenario 3.

[42] The work in 2005 by the Ministerial Task Team on SHI estimated a contribution of 3.1% of income for families earning just above the tax threshold and 4.1% for families earning above R2,000 pm. However, that analysis used a larger benefit package than PMBs and included comprehensive primary care (costing some R80 pm more than PMBs). The recommendation was to use income cross-subsidies only for the most efficient price of the expanded PMBs. Members were then required to pay directly to medical schemes the difference between the most efficient price and the REF price of PMBs (also some R80 pm).

Table 2: Estimate of the Social Security Contribution for Healthcare

			Scenario 1	Scenario 2	Scenario 3
			Contributors are those earning above the tax threshold.	Contributors are those earning above R2,000 pm.	Contributors are those earning above R1,000 pm.
Working Age and Children	**Contributors**	**Number of Contributors**	**4,781,470**	**6,040,447**	**7,950,348**
		Total Monthly Income	**33,087,509,704**	**35,880,434,412**	**38,461,495,087**
		Monthly Contributions at 1% of Income	330,875,097	358,804,344	384,614,951
		Number of Contributors already on Medical Schemes	2,594,843	2,750,302	2,848,590
		Number already on Medical Schemes in Households of Contributors	5,316,507	5,521,275	5,671,632
		Number in Households of Contributors where some in HH are on Medical Schemes	6,361,069	6,682,469	6,902,900
		Number of Beneficiaries in all Households of Contributors to Mandatory SHI	**12,425,372**	**15,641,306**	**20,589,084**
	Voluntary Members	Number already on Medical Schemes	924,772	720,004	569,647
		Number in Households where some in HH are already on Medical Schemes	**1,365,293**	**1,043,892**	**823,461**
	Upper limit of Number on Medical Schemes under SHI (Mandatory + Voluntary)		**13,790,665**	**16,685,198**	**21,412,545**
Over age 65	**Households of Contributors**	Number on Medical Schemes in Households of Contributors	74,974	80,039	83,047
		Number in Households of Contributors where some in HH are on Medical Schemes	154,351	165,422	189,096
		Number of Beneficiaries in all Households of Contributors	**304,867**	**366,514**	**454,735**
	Not in HH of Contributors	Number on Medical Schemes	235,368	230,303	227,295
		Number in Households where some in HH are on Medical Schemes	**282,707**	**271,636**	**247,961**
	Number aged over 65 on Medical Schemes under SHI		**587,573**	**638,150**	**702,697**
Total Number Potentially on Medical Schemes under SHI			**14,378,238**	**17,323,348**	**22,115,242**
Funding for Prescribed Miminum Benefits under Social Health Insurance		Price of PMBs pbpm	178.14	174.42	170.68
		Per Capita Subsidy pbpm	99.67	99.67	99.67
		Total Cost of PMBs (R million) pa	**30,736**	**36,258**	**45,296**
		Total Per Capita Subsidy (R million) pa	**17,197**	**20,719**	**26,451**
		Amount for balance of PMBs to be funded by Social Security Contribution (R million) pa	11,700	14,030	17,544
		Amount for balance of PMBs funded by members in Voluntary environment (R million) pa	1,286	936	702
		Amount for balance of PMBs for Over 65s to be Funded by Social Security Contribution (R million) pa	553	572	599
Estimate of Social Security Contribution for Social Health Insurance		**Social Security Contribution for Working Age and Children as % of income of Contributors**	**3.0%**	**3.3%**	**3.8%**
		Social Security Contribution needed to fund over age 65s as % of income of Contributors	**0.1%**	**0.1%**	**0.1%**
		Total Social Security Contribution as % of income of Contributors. No Contributions paid if over age 65.	**3.1%**	**3.4%**	**3.9%**
		Wage Subsidy required to pay total Social Security Contributions for people earning below the tax threshold (R million) pa	not applicable	1,137	2,541
		Extra Social Security Contribution for extra R10 of benefit in minimum package	**0.4%**	**0.5%**	**0.6%**

(2005 Rand terms)

The One-Year Model, with very detailed data on potential contributors, also allows an estimate of the cost of a wage subsidy that would cover the total social security contribution for healthcare of those earning below the tax threshold.

Table 3: Estimates of Wage Subsidy for Social Security Contribution for Healthcare (2005 Rand terms)

		Scenario 1	Scenario 2	Scenario 3
		Contributors are those earning above the tax threshold.	Contributors are those earning above R2,000 pm.	Contributors are those earning above R1,000 pm.
Estimate of Wage Subsidy for Social Health Insurance	Number of Contributors	4,781,470	6,040,447	7,950,348
	Contributors earning below Tax Threshold	-	1,258,978	3,168,879
	Total Social Security Contribution as % of income of Contributors. No Contributions paid if over age 65.	3.1%	3.4%	3.9%
	Wage Subsidy required to pay total Social Security Contributions for people earning below the tax threshold (R million) pa	not applicable	**1,137**	**2,541**
	Total Social Security Contribution fixed at level calculated for Scenario 1.	3.1%	3.1%	3.1%
	Wage Subsidy required to pay total Social Security Contributions for people earning below the tax threshold (R million) pa	not applicable	**2,349**	**5,890**

There are two approaches that could be used for the wage subsidy. As shown in Figure 13, the addition of many more people under Scenarios 2 and 3 does not bring a commensurate amount of income to social security and thus the social security contribution increases to 3.4% and 3.9%. The wage subsidy to cover the contributions of those earning below the tax threshold will be lower using these increasing contribution rates than it would be if the contribution level was pegged at that determined for the Scenario 1 contributors alone. A decision needs to be made as to the degree of social solidarity to engineer into the system.

The impact of the design of a future, more comprehensive, Prescribed Minimum Benefit package is also dealt with in Table 3. The cost of an additional R10 of benefit is estimated to cost 0.4% of income for Scenario 1, 0.5% for Scenario 2 and 0.6% for Scenario 3. The cost of PMBs reduces under increased numbers of people covered, as shown in section 3.6, thus the cost of an additional benefit that costs R10 in Scenario 1 would probably be about the same in the other scenarios, i.e. some 0.4% of income. The exact impact would need the detailed definition and costing of the new expanded PMB package.

5.5 Funding for PMBs in Each Period of Reform

Section 3 discussed the complexities of fixing a price for healthcare and hence the level that we need to fund for medical scheme contributions for the elderly. In addition, section 2.2 and Appendix B have indicated the different flows at various stages of reform that will also impact the amount to be paid for medical scheme contributions. We can now combine the estimate of the social security contribution from the previous section with these strands to create a table of the amount to be paid for Prescribed Minimum Benefits at various stages of healthcare reform. The table is given overleaf and the results for an elderly person illustrated graphically below.

In Periods 1 and 2, the elderly were substantially disadvantaged because of risk-rating and the practice of designing packages to attract desired risk groups. The introduction of the REF substantially improves the position for the elderly (and those with chronic disease). The introduction of a per capita subsidy reduces the direct cost of medical scheme membership. Under an SHI that covers the REF price of PMBs, only the non-healthcare (administration) costs need to be paid directly to a medical scheme. An alternative SHI construct is also shown, similar to that used by the Ministerial Task Team. On the far right of the graph an expanded PMB package is partly paid by income cross-subsidies and partly by members themselves.

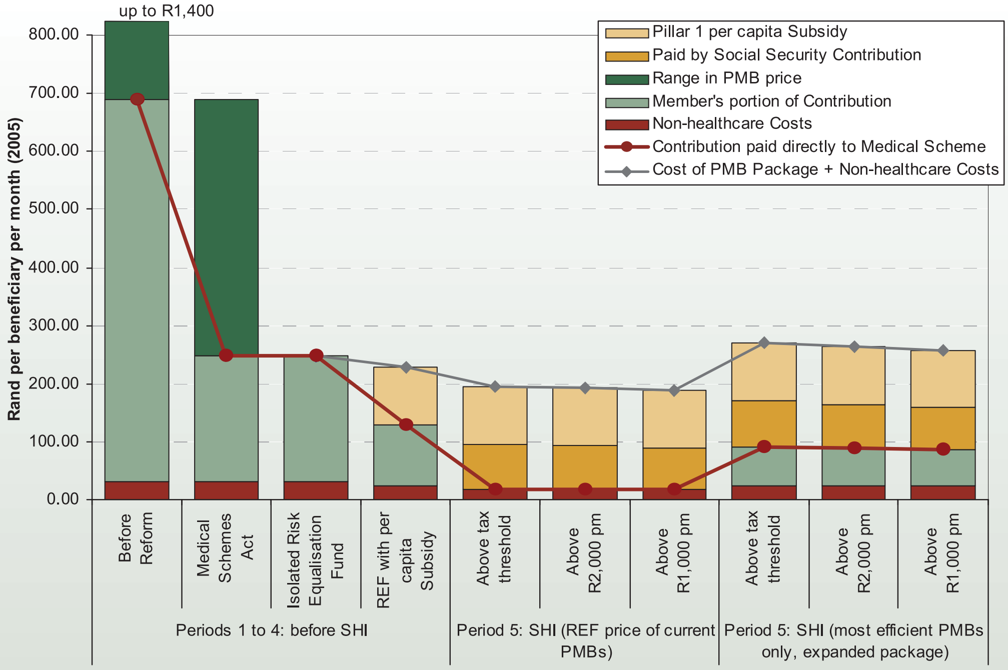

Figure 16: Sources of Funding for PMBs in Each Period of Reform

(2005 Rand terms)

Table 4: The Funding of Prescribed Minimum Benefits in Each Period of Reform (expressed in 2005 Rand terms)

Period	Key Features of Reform	Prescribed Minimum Benefits	Government Subsidy	Social Security Contribution	Non-healthcare Costs	Efficiency of Healthcare Delivery	Amount Payable Directly to Medical Scheme for PMBs
General explanation across all periods		Using 2007 definitions of PMBs: all emergency care; 270 diagnosis-treatment pairs (largely hospital based); diagnosis, treatment and medicine for 25 chronic conditions.	Pillar 1 Subsidy	Pillar 2 Mandatory Contribution. Collected by SARS and paid to REF which pays risk-adjusted amounts to medical schemes.	Amount determined by scheme for administration and marketing.	Member may choose care delivered in network for lower cost. Member benefits from or pays for this choice.	
Period 1: 1993 to 2000: Before Reform	No PMBs; risk-rating by age and health	Age 10 pays R32 pm, age 40 pays R142 pm with no chronic disease; For male age 75, R659 pm but from R924 pm with asthma to R1,382 pm with cardiac disease. Highest cost diseases not covered.	Tax break to individual related to cost of package chosen. Highest benefit for high income earners. No benefit below tax threshold.	none	Approximately 14%: range for elderly from R30.52 to R30.52	As above, very little network development.	Depends on age and health. Range for elderly from R689.52 to R1412.52
Period 2: 2000 to 2007: Medical Schemes Act	PMBs; open enrolment; community-rating at option level	R217.99 but varies by option chosen (between R136.03 to R638.24 pm for open scheme options)	Tax break to individual related to cost of package but capped from 2006. Highest benefit for high income earners. No benefit below tax threshold.	none	Approximately 14%: Industry average R30.52 but varies by option from R30.52 to R30.52	Some network development beginning.	Industry average of R217.99 plus non-healthcare costs of R30.52. Total direct contribution of R248.51 but varies by option chosen from R166.55 to R658.56.
Period 3: Isolated Risk Equalisation Fund	Risk-adjusted cross-subsidies; community-rating at industry level	R217.99	Tax break to individual related to cost of package but capped. Highest benefit for high income earners. No benefit below tax threshold.	none	Approximately 14%: R30.52	Some network development.	R217.99 plus non-healthcare costs of R30.52. Total direct contribution of R248.51
Period 4: REF with per capita Subsidy	Tax expenditure subsidy removed; replaced with per capita subsidy	R203.15	R99.67	none	Downward pressure because more visible with perhaps reduction to 12%: R24.38	Further network development encouraged. Lower cost products could be available.	R203.15 less Pillar 1 subsidy of R99.67 plus non-healthcare costs of R24.38. Total direct contribution of R127.86
Period 5: Social Health Insurance [cover PMBs at REF community rate]	Income cross-subsidies above tax threshold	R178.14	R99.67	Estimate 3.1% of income for those above tax threshold	Perhaps 10%: R17.81	No balance to be paid by member unless very inefficient plan.	PMBs paid in full by Social Security Contribution and Pillar 1 Subsidy. Only pay non-healthcare costs. Total direct contribution of R17.81
	Income cross-subsidies R2,000 pm	R174.42	R99.67	Estimate 3.4% of income for those above R2,000 pm but contributions for those below tax threshold could be covered by wage subsidy.	Perhaps 10%: R17.44	No balance to be paid by member unless very inefficient plan.	PMBs paid in full by Social Security Contribution and Pillar 1 Subsidy. Only pay non-healthcare costs. Total direct contribution of R17.44
	Income cross-subsidies above R1,000 pm	R170.68	R99.67	Estimate 3.9% of income for those above R1,000 pm but contributions for those below tax threshold could be covered by wage subsidy.	Perhaps 10%: R17.07	No balance to be paid by member unless very inefficient plan.	PMBs paid in full by Social Security Contribution and Pillar 1 Subsidy. Only pay non-healthcare costs. Total direct contribution of R17.07
Additional Comments		Changes to include more benefits in PMB package would increase price of PMBs and Social Security Contribution or balance paid by members.	Per capita subsidy set to be equal for those in public sector and choosing private sector. Paid to REF and risk-adjusted amounts paid to schemes.	Assumes people over age 65 do not pay Social Security Contribution for healthcare. Value of benefit is 0.1% of income in above numbers.			

6. Principles of Funding for Post-Retirement Healthcare

We now have sufficient technical information to understand the impact of funding post-retirement medical scheme contributions at various periods in the ongoing reform of the South African healthcare system. This section suggests principles for how to address the problem of funding for post-retirement healthcare.

6.1 Collective vs. Individual Funding

The first key issue it to separate those parts of the medical scheme contribution that should be funded collectively from those that should be funded individually, if at all. It is not feasible to consider collective funding unless there is a common package of benefits. It makes sense to fund only the common benefits collectively and to ensure that any voluntary choices above the common package are paid for, with or without funding, on an individual basis.

6.2 Adequacy of the PMB Package

There is widespread dissatisfaction with the current definition of Prescribed Minimum Benefits but no clear definition has yet emerged of a more acceptable package. The International Review Panel[43] said:

> …bearing in mind that PMB is not sold as a stand-alone package, the imperfect quality of data about utilization and the Panel's reservations regarding the comprehensiveness of the PMB catalogue (including the difficulty that from an insurance perspective it is somewhat meaningless if it refers to pathologies rather than to treatment), the Panel recommends to revisit and review the composition of the PMB …. The Panel sees strong arguments in favour of the expansion of the basic package to include primary care and outpatient drugs, and deems these as necessary prerequisites on the way towards SHI.

Data from the pricing of PMBs in 2001 shows that the current PMB diagnosis-treatment pair definitions cover some 80% of hospital care for the Under 1s, all of pregnancy and maternity events and close to 70% of hospital events for the elderly. This is demonstrated graphically below.

The definition of PMB diagnosis-treatment pairs has been further clarified since 2001 but there is no definitive costing of the current extent of coverage. The coverage of ambulatory care for chronic diseases has also not been fully tested against all chronic disease expenditure in medical schemes. Further research is needed on both issues.

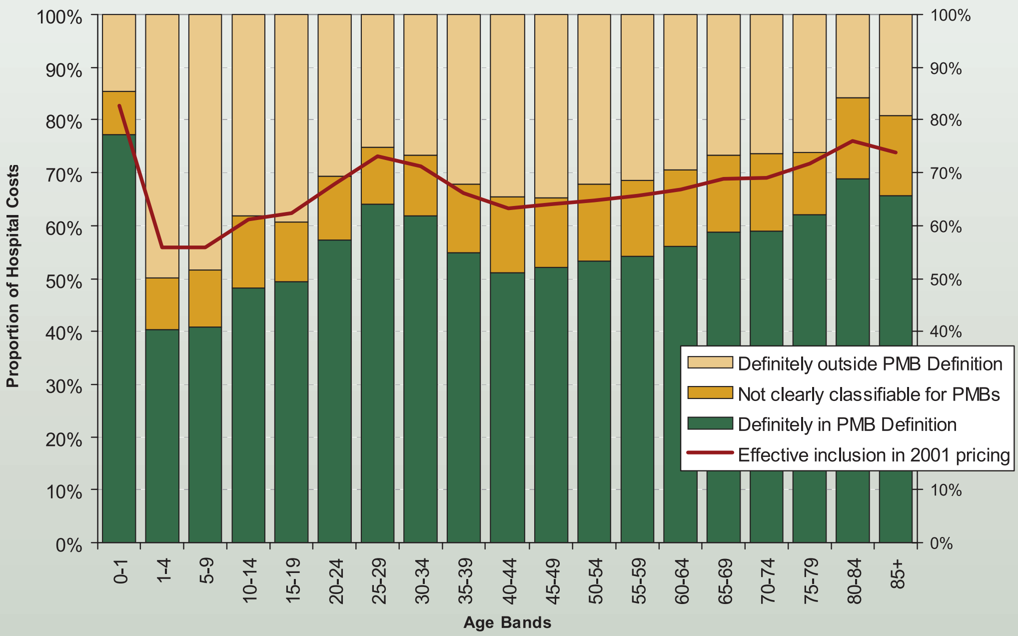

Figure 17: PMB Coverage of Hospital Costs by Age Band (2001 definition of PMBs)

[43] Armstrong J., Deeble J., Dror D.M., Rice N., Thiede M., Van de Ven W.P.M.M. (2004) *The International Review Panel Report to the South African Risk Equalization Fund Task Group.* 16 February 2004. pp. 21 35.

There are several broad proposals for an amended PMB package. Some favour the inclusion of comprehensive primary care while Circular 8 from the Council for Medical Schemes advocates the inclusion of all hospital costs in common benefits. The first costing of PMBs in 1998 by Khosa and Söderlund[44] excluded primary care under the assumption, at that time, that primary care would be provided to all in public-sector clinics. The proposals dealing specifically with low-income schemes[45] have suggested a minimum benefit package with comprehensive primary healthcare (GPs, specialists, dentists, optometry, and medicines) but with all hospital events covered only in public-sector hospitals.

Many of the criticisms of the expansion of PMBs deal with the impact on low-income workers. There are also substantial affordability concerns for the elderly of expanding the PMB package. The issue here is one of sequencing the reforms, as the expansion of PMBs with partial or complete income cross-subsidies would not pose the same problem for these groups. The package could be partially extended under Period 4 when a per capita subsidy is introduced and fully extended in Period 5 with full income cross-subsidies. Any portion still payable by members over age 65 might still be problematic and would need careful modelling.

In principle therefore, collective funding should be for PMBs as currently defined. It is too speculative to consider funding for expanded PMBs until further clarity is obtained on an expanded and affordable PMB package.

However, it needs to be recognized as a constraint that if only the current definition of PMBs is funded, then older members are likely to still want more comprehensive packages of care from their medical schemes. This leaves a gap which will need to be funded individually until such time as PMBs are expanded.

A key recommendation to policymakers is to accelerate the discussions with the medical scheme industry on a preferred definition of an expanded and affordable minimum benefit package.

6.3 Coverage of Individual or Family Members

The clearest definition of cover is to provide for the balance of the cost of PMBs for all those over the retirement age adopted for contributory social security. This seems likely to be age 65 initially but should be linked to a definition of life expectancy to ensure that if people expect to live longer, that the social security structure adapts accordingly to a higher retirement age. It is advocated that a common retirement age should apply to men and women.

The definition above is clearly linked to an individual attaining that age. This simplifies administration in that the benefit is paid on behalf of the individual without the need to consider the complexities of changing family structures.

A much more complex task is to define the coverage that could be given on death or disability. The death of a person over retirement age is simply handled because a spouse or partner over the same age continues to receive benefit in their own right. If the benefit is for the balance of the cost of PMBs per beneficiary, then it does not seem logical to provide a benefit for medical scheme contributions for the family – in this case the younger partner on the death of an elderly person. Similar concerns apply to providing child subsidies on the death of a parent.

The graphs below show the marriage and family constructs of contributors in the three scenarios, their children and all those over age 65.

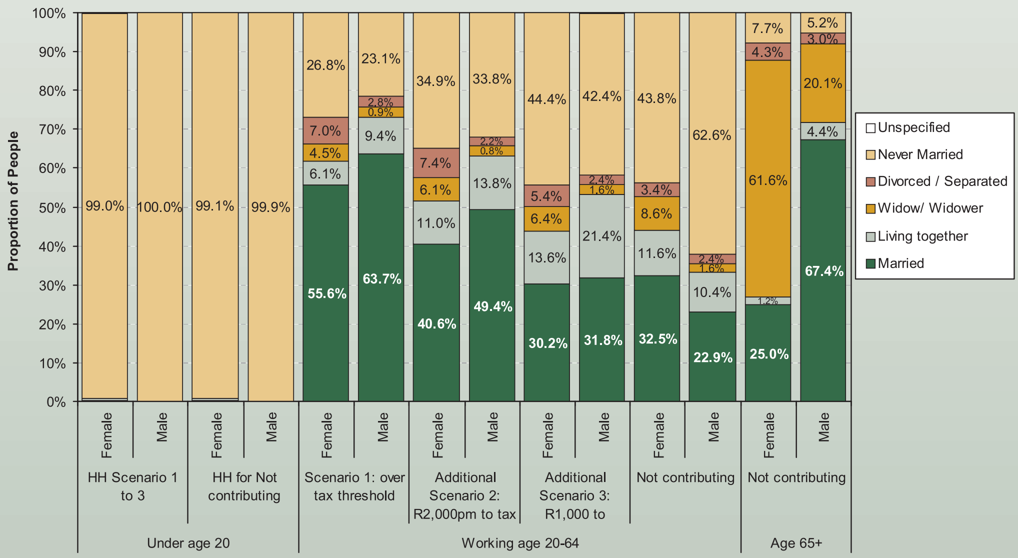

Figure 18: Marital Status by Scenario, Age Group and Gender
(Source: GHS2005)

[44] Söderlund N., Peprah E. (1998) An Essential Hospital Package for South Africa: Selection Criteria, Costs and Affordability, Centre for Health Policy Monograph Number 52.
[45] Broomberg J. et al., (2006) Consultative Investigation into Low Income Medical Schemes. Final Report, 7 April 2006, p. 100.

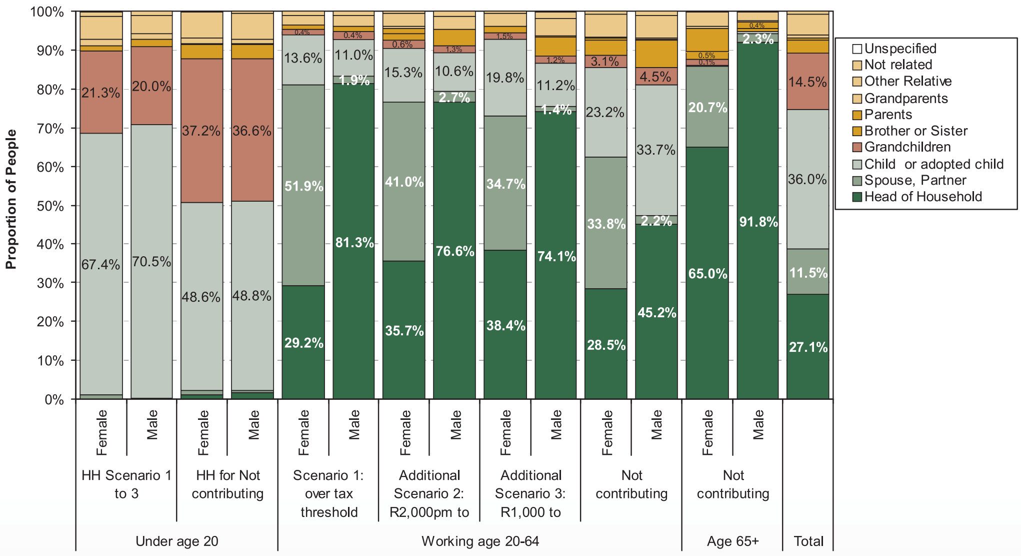

Figure 19: Family Relationships by Scenario, Age Group and Gender
(Source: GHS2005)

Generally, the households of those in Scenario 1 (earning above the tax threshold) tend to be close to the construct of mother, father and children. The households of the additional contributors with lower income levels in Scenarios 2 and 3 tend more towards extended families.

Survivor benefits were designed into retirement programmes in a time when families were more nuclear and typically only the male was the bread-winner. Given the complexities of family structures today and the increasing likelihood that partners work, we need to ask the basic question of 'why' when thinking about survivor benefits.

In Scenario 1 alone, of the 4.8 million contributors, only 2.3 million (48.8%) are the only contributor in the household. A further 2.0 million (41.8%) are in households with two contributors and the balance are in households with three or more contributors.

There are also questions of the assignment of benefit on divorce and questions of entitlement for multiple spouses which complicate the development of survivor benefits. In any event, the survivor benefits for retirement need to be developed first and then those for healthcare can follow suit. This is to be the subject of a separate report commissioned by the Department of Social Development. For the purposes of this report, the benefit is described as providing for the balance of the cost of PMBs for all those over the retirement age adopted for contributory social security.

6.4 Coverage Earned Over Time

The Department of Social Development discussion document on retirement reform[46] suggests that there should be "… a mechanism whereby individuals create an entitlement to subsidised post-retirement contributions based on their years of contributing to a medical scheme."

Since 2000 medical schemes have been required to provide certificates to members of their previous membership so that on moving from one scheme to another they do not face waiting periods or late-joiner penalties. It is thus conceivable that records of membership for the last ten years would be accessible if the social security system comes into operation somewhere around 2010. It would also be feasible to design a benefit in such a way that in the early years there is a deemed entitlement and that this deemed entitlement begins to wind down as time goes by and actual records of membership exist.

The same construct would be feasible if the definition of benefits was to be related to the number of years of mandatory social security contribution instead of medical scheme membership. However, family members of a contributor would still need to be identified. The family definition could be set equivalent to that used for survivor benefits.

It is theoretically possible but administratively cumbersome to consider a combined definition of years of mandatory contribution and years of medical scheme membership. However, again in the interests of simplicity of design and ease of understanding of members, this does not seem like a useful alternative. In any event, if health and retirement both form part of a mandatory social security system, then after a generation of operation the distinction becomes irrelevant for contributors. The administration of family structure changes over several decades is likely to be problematic.

It seems more logical, as suggested by the Department of Social Development, to keep separate records for each person according to their membership of medical schemes under Social Health Insurance. These records would be readily available in the registry envisaged for the Risk Equalization Fund, as discussed in section 7.1.

[46] Department of Social Development (2007). Reform of Retirement Provisions, p. 96.

One possibility is for entitlement to build up at the same rate as for the defined retirement benefit envisaged under the pay-as-you-go (PAYG) system. This may mean that entitlement builds up to the full level over (say) 30 years. This gives some flexibility in the potential working period of 20 to 64 years (45 years) for periods of unemployment, further study, maternity or paternity leave.

The total cost of funding for post-retirement medical scheme contributions for the balance of PMBs for existing pensioners under a Social Health Insurance system was shown to be 0.1% of the income of contributors under all three scenarios (see section 5.4 and Table 2). Note that this was determined using an immediate full benefit for all eligible people over age 65, as longitudinal working history is not available in the One-Year Model. While there needs to be further testing of the long-term cost of this benefit (see section 8.3), the amount needed to cover today's pensioners in full for the balance of PMBs under SHI is very small at R599 million per annum for Scenario 3 (2005 Rand terms). While it is administratively feasible, it does seem wasteful to develop the administration of earned entitlements to this benefit when the total value is so small.

It is suggested that under a mandatory system the entitlement could be built up over a relatively short period, such as ten years of medical scheme membership, as the intention should be to cover all medical scheme members in retirement. In the transition from voluntary to mandatory retirement and healthcare, there could be some value in using the build-up of entitlement as an inducement to become a member of a medical scheme. However, the per capita subsidy for immediate membership is probably a greater incentive for full family membership than the promise of a future subsidy for the current small PMB package. The larger the PMB package in future, the greater will be the value of any post-retirement subsidy and the greater the inducement for early membership of medical schemes.

The mechanism for earning entitlement will need further work when the income cross-subsidies in social security are clarified and when the administration of SHI is more fully described. It is recommended that for further phases of testing the viability of social security the entitlement is to the balance of PMBs in full and is not linked to years of medical scheme membership or years of contribution to social security.

6.5 Funding and Funding Vehicle

The funding for the collective benefit of the balance of PMBs for all over the age of 65 lends itself to a defined benefit system. It can usefully form part of the benefits paid from the pay-as-you-go portion of mandatory contributions. It is on this basis that the benefit has been tested in the long-term model, as shown in section 8.3.

Post-retirement medical scheme contributions for any voluntary package above PMBs were found to be individual responsibility. These lend themselves, if funded, to a defined contribution fund.

The question must be asked, though, whether it is advisable to earmark funds specifically for additional voluntary healthcare funding in retirement. The question is often asked why funds should be set aside for healthcare if we don't prescribe setting aside funds for food or heating or accommodation. While there is certainly a need to ensure long-term protection of any funds set aside for this purpose, it may be simpler to incorporate these amounts with any other voluntary funding for retirement available to contributors.

6.6 Summary of Proposed Definition of Cover

The following principles are proposed for the post-retirement subsidy for medical scheme membership once mandatory social security for health becomes operational:[47]

- Prescribed Minimum Benefits are the common package that all medical schemes must provide: hence this element, as defined from time to time, should be collectively funded.
- For people over age 65, the balance of the cost of PMBs, after the per capita subsidy, should be funded from the social security contributions of those still working. This amounts to a benefit of R78.47 per month under Scenario 1, R74.75 under Scenario 2 and R71.01 pm under Scenario 3 (all figures in 2005 Rand terms).
- There should be no pre-funding of this amount and it should form part of the pay-as-you-go funding of the social security system.
- Entitlement to the post-retirement subsidy is determined individually for each person according to the number of years of medical scheme membership.
- As far as possible, it is preferable to engineer an entitlement to PMBs in full after age 65 rather than to a proportion of PMBs based on years of membership.
- Minimum membership for entitlement might be set at a nominal ten years of membership after the year 2000, which is when historical records of membership were first required by legislation.
- Testing of the cost of benefits should be done using an entitlement to the balance of PMBs in full rather than an amount linked to years of medical scheme membership or years of contribution to social security.
- Packages above PMBs are voluntary choice and thus should be individually funded alongside other voluntary retirement needs. This could result in a need to fund for roughly[48] R175 to R275 pm as elderly members require more comprehensive care than the currently defined PMBs.
- When PMBs are extended the need for voluntary funding will become smaller but there is insufficient detail available at this time to quantify the impact of revised PMBs or any cost-sharing with members.

[47] Period 5: Social Health Insurance in the graphs on periods of reform.

[48] The difficulty with current costings of comprehensive packages is that they are designed to attract the elderly and hence the effects of community rating and mandatory membership on lowering the price to the elderly are not felt. The future allowable structure for package design in medical schemes will have a significant impact on the cost of comprehensive packages and this matter needs to stand over until detailed work progresses on the desired structure.

7. Proposed Institutional Framework

The key institutional component to enable social security for health under a Social Health Insurance (SHI) system is the Risk Equalization Fund (REF). The institutional framework for any funding of post-retirement medical scheme contributions requires linkages with SHI and the Risk Equalization Fund.

7.1 Operation of the Risk Equalization Fund

The Minister of Health, in a letter dated 24 April 2005, requested the Council for Medical Schemes to test the operation of the risk-adjustment formula and establish the infrastructure for risk-adjusted transfers between medical schemes. The design and operation of the infrastructure for the REF was elucidated in October 2005 in a report from the Office of the Council for Medical Schemes to the Department of Health.[49]

The Council for Medical Schemes has collected data on the age and disease profiles of all medical schemes since 2005 under the so-called 'shadow process' and has been developing systems, processes and policies for the operation of the REF. During the shadow period, schemes submit the data in the form of highly summarized REF Grids. However, this form of data submission is not readily auditable and before actual transfers occur there is a need to establish a more secure method of data collection and storage.

The Council for Medical Schemes recommended that a registry of all people on medical schemes be developed for the REF to fulfil its future role as the institutional vehicle for Social Health Insurance. The registry would contain unique identifying information to ensure that a person could not simultaneously be a member of two medical schemes. This ensures that per capita subsidies and risk-adjusted payments are correctly allocated to medical schemes depending on their validated beneficiaries. The REF would separately hold detailed information relative to the REF risk factors to be able to calculate the risk-adjusted payments. A key issue in process design is the care being taken to ensure member confidentiality. The functioning of the registry is outlined in Appendix G.

In order to track contributions to Social Health Insurance, linkages to the South African Revenue Services have been explored. It was envisaged that SARS would provide the secure infrastructure for the collection of social security contributions for health.

The organizational structure proposes that an REF unit is established within the Office of the Council for Medical Schemes that is separate from the Regulatory functions of the Council. The REF Office will contain only personnel that perform functions unique to the REF, but some functions such as Information Technology, Internal Finance and Human Resources would be shared with the Office. It was envisaged that 10 additional people would be needed for the shared resources and it was proposed that three new departments with some 17 people would be established in the REF Office:

- A Registry Department, which will be responsible for the maintenance of the REF Registry and reconciliation and verification of data on the Registry;
- An REF Finance Department, which will interpret verified information on the Registry to consider and recommend the transfer of funds to and from medical schemes; and
- An REF Audit department, which will evaluate clinical and financial information on the registry and apply legislation when required.

The draft bill for an amendment to the Medical Schemes Act which would establish the Risk Equalization Fund was gazetted in November 2006. Further testing of the REF systems and the Registry can only occur once enabling legislation is in place. Further work on operational processes and external auditing of the systems is also required. It is not certain when the REF could become operational but it seems unlikely that this can be before 2010.

7.2 Linkage to the Central Retirement Funds

The Social Development report concluded that;[50]

> It is recommended that a portion of every medical scheme contribution, referred to here as a post-retirement contribution (PRC), be allocated to the GSRF[51] to fund the post-retirement cover of the contributor, and to fund the death and disability insurance for contribution protection. This contribution to the GSRF would be mandatory for all qualifying medical scheme members.

The use of medical schemes as collection agents for the minimum benefit portion of pre-funding is only necessary if there is no mandatory contributory system for healthcare as part of social security. There is a strong need for income cross-subsidies to be established in healthcare and it would be a better use of legislative energy to work towards the more rapid implementation of Social Health Insurance. The diagrams below show the envisaged flows under social security for healthcare in retirement.

Both graphs use the Period 5: Social Health Insurance flow as a basis, as shown and described in section 2.3.

The first graph above deals with the funding of minimum benefits and for a person over age 65, there would be no income-related payment. Instead, the amount needed by the REF in respect of all medical scheme members over age 65 is obtained directly from the central PAYG defined benefit retirement fund. The amount funds for the difference between PMBs and the per capita subsidy. The REF then continues to pay risk-adjusted amounts to all medical schemes. There is an inter-generational payment: today's working people provide the subsidy for today's pensioners.

Note that the flow of funds for contributors under SHI could follow the same pattern with the collection for the social security

[49] Council for Medical Schemes (2005) Requirements for the Full Implementation of a Risk Equalization Fund for South Africa, Report to the National Department of Health, 4 October 2005.
[50] Department of Social Development (2007). *Reform of Retirement Provisions*, p. 97.
[51] Government Sponsored Retirement Fund, which is envisaged as having a pay-as-you-go defined-benefit fund and facilities for fully funded defined-contribution accounts.

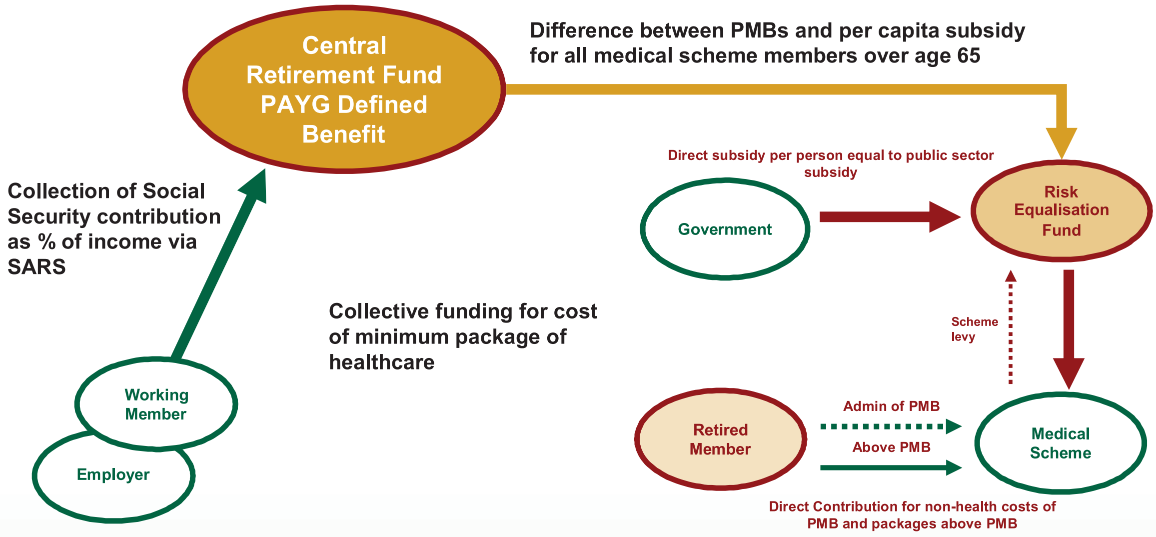

Figure 20: Proposed Institutional Framework for Minimum Benefits for Healthcare after Retirement under Social Security

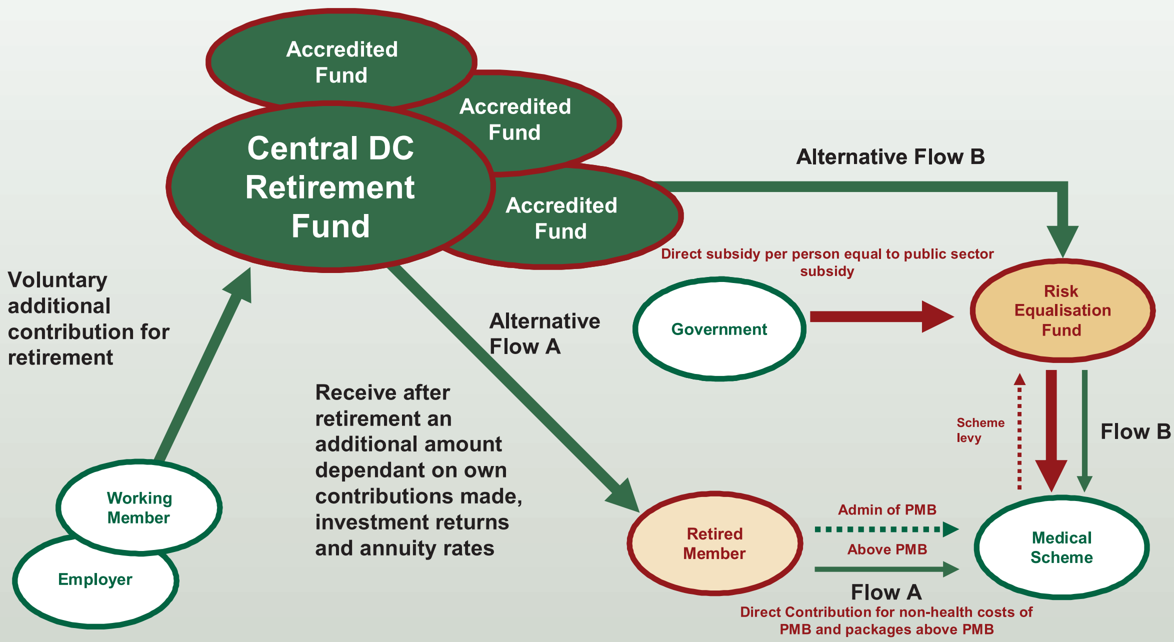

Figure 21: Alternatives for Institutional Framework for Voluntary Additional Benefits for Healthcare after Retirement

contribution going via the central fund to pay to the REF the balance of PMBs for all people covered by Social Health Insurance. In any event, it seems clearer to add the 0.1% cost of providing for those over age 65 to the amount in respect of other healthcare contributions, rather than deal with it as part of retirement funding. Thus when annual changes in the cost of healthcare are notified or when there is a change in the PMB package, the cost for those over 65 is conceptually kept together with that for workers and their families.

There are two possible flows for the voluntary benefits above PMBs. During their working life working members make additional voluntary contributions to either the central defined contribution facility or to any accredited defined contribution fund. On retirement, the same individuals get an amount which depends on the amount of contributions over their working life, the investment returns achieved and annuity rates available at the time of retirement. Under Alternative A, the annuity is paid directly to the retired individuals and they make decisions as to how much to spend on additional healthcare or whether to retain the income for another purpose.

Under Alternative B, funds earmarked only for healthcare in retirement are paid to the REF as a conduit and the REF pays the amount directly to the medical scheme chosen. Alternative B has an advantage in that funds can be ring-fenced for healthcare and it may be possible, although this is not explored here, to provide a somewhat more favourable tax dispensation for such earmarked funds. However, Alternative B, while appearing simple in theory, would involve some very complex practical issues in administration. The cost of the medical scheme benefit changes annually and people can choose annually which supplementary healthcare benefits they want. That price would then need to be transmitted from the scheme to the REF and then to the retirement fund to ensure that the exact amount of the difference to PMBs is received. Problems will arise if the regiment funds are exhausted in which case the scheme will have to go back to the member to get the funds directly.

On balance, it would seem that Alternative A is much simpler and this is the preferred solution for voluntary healthcare benefits above PMBs.

This exposition has been determined for Period 5 of healthcare reform, in other words under the full implementation of income cross-subsidies under Social Health Insurance. Two other alternatives for earlier phases of the reform are discussed in section 9.2.

The funds flow used for any enhanced PMB package may alter the preferred solution if there is a substantial portion of the cost to be paid directly by members. However, the important first step is to get clarity on the intended future composition of PMBs and this is discussed further under section 9.3.

7.3 Administration of Subsidies under SHI

The details for the administration of SHI have not been fully developed, so it is not possible to determine with certainty the additional administration required. The list below is an attempt to outline the steps needed for SHI and post-retirement subsidy administration:

- Notification by the contributor to the medical scheme of current family composition for medical scheme membership.
- As members are required to pay the administration fees directly to the medical scheme, this regular payment serves as a notification that the person remains a member of a specific scheme.
- Notification by the medical scheme to the SHI registry of membership and family composition.
- Notification from SARS to the SHI registry of payment of social security contribution for those under age 65 and earning above the social security income threshold.
- In the case of the spouse also being a contributor, the link will need to be established to the same family so that payment by any of the contributors triggers entitlement to the subsidies for the family.
- In the case of those over age 65, only continued membership of the medical scheme is needed for the subsidies.
- Collation by the SHI registry of the entitlements to subsidy of the family. This will include per capita amounts and post-retirement subsidies for those over age 65.
- Notification from the registry to the medical scheme of the total subsidy linked to the family.
- Notification by the medical scheme to the member of the balance needed to be paid for PMBs for the entire family.
- If a beneficiary is not entitled to the per capita subsidy, then the scheme needs to raise the per capita amount directly from the member.
- If the family is not contributing to social security or all family members are not over age 65, the income cross-subsidy falls away and the scheme will need to charge an amount for the notional balance of PMBs above any per capita subsidy. There are several possibilities for what this amount should be to avoid any incentives to escape mandatory contributions. As these are dependent on the degree of income cross-subsidy and solidarity engineered into the system, they are not explored here.

This suggested administrative outline for SHI seems to be able to deal with the post-retirement subsidies fairly readily. The frequency of notification might be an issue and it may be necessary to stagger entitlement so that payment of a social security contribution in one period (month or quarter) provides for subsidies in the next period.

There would seem to be implementation issues with respect to the monthly cashflow needed by the REF which would need to be addressed, as discussed in section 9.4.

8. Risks and Risk Mitigation

This section identifies the major risks and proposes risk-mitigation strategies.

8.1 Increase in Future Healthcare Costs

The greatest risk in funding for post-retirement medical scheme contributions is that the cost of healthcare will continue to out-strip inflation. The graph below illustrates the increase, after inflation, in the average cost of healthcare per beneficiary per month across all medical schemes since 1974.

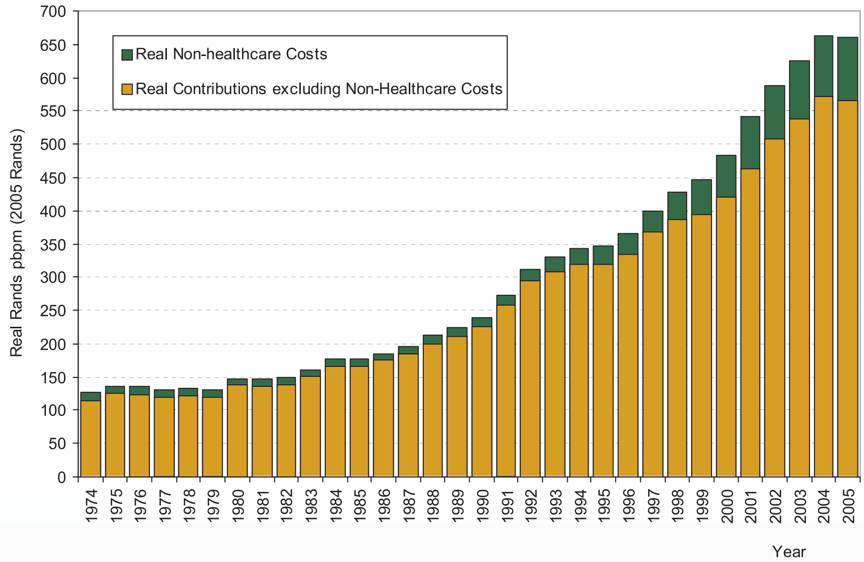

Figure 22: Average Real Contributions pbpm since 1974, expressed in 2005 Rand terms (Source: Annual Reports of the Council for Medical Schemes)

The graph above shows that, after inflation, and ignoring non-healthcare costs, the average contribution to medical schemes has increased from some R120 pbpm in the early 1970s to R565 pbpm (all figures in 2005 Rand terms). Escalating non-healthcare costs are of course a concern for the Registrar, as they are currently at 14.4% of gross contributions and have escalated sharply since the mid-1990s. These are being systematically dealt with by the Registrar and his staff.

We need to be careful not to see this escalation in contributions as entirely a private-sector delivery problem. Health costs have increased world-wide over that time period and there have been substantial changes in what is regarded as ‘normal’ treatments over that period. It is instructive to remember that penicillin came into general usage only during the Second World War. Treatments for many chronic diseases only became available in the 1980s and chemotherapy for cancer became widespread in the 1990s. With an ageing Western world, the focus of pharmaceutical firms has been on the diseases of the (wealthy) elderly and we now expect to be treated for many medicalized conditions that previously would have been ascribed to natural ageing. It would be foolhardy to postulate what healthcare developments may bring in terms of new technology and treatments in the next 75 years.

However, even today, healthcare systems all over the world suffer from the same problem: that we demand more healthcare than the resources available, not matter on what basis these are funded. Dealing with the escalation in healthcare costs into the future will require greater focus on rationing of care so that available healthcare resources are directed towards the priorities of our whole society. ‘Reasonable care for all’ rather than ‘first-world care for some’ may be the path chosen by society.

At an industry level there are on-going reforms needed in the way medical schemes purchase care from healthcare providers. More active purchasing can have the effect of involving healthcare providers in the rationing decisions so that the decisions are not purely financial but taken from a clinical base. The long-term modelling of social security for healthcare costs needs to consider the implications of long periods when the escalation in healthcare costs exceeds inflation.

8.2 More People Receiving Initial Benefits

One concern is that there may be long-standing pensioners on medical schemes that may have had to discontinue medical scheme cover in recent years as contributions became unaffordable. The introduction of a benefit where those over 65 do not pay for the balance of PMBs might bring more pensioners back under cover. Others may join schemes for the first time to get the healthcare benefit at retirement.

The GHS2005 gives a figure of 310,342 people over age 65 on medical schemes in June 2005. There are a further 108,121 in households where there is someone on a medical scheme to give a potential total of 418,463 on medical schemes over the age of 65.

The REF data from the Council for Medical Schemes gives 446,313 people over age 65 on medical schemes in June 2006.

The cost of the benefit in section 5.4 was calculated using a larger group of pensioners, including those in households where there were already some people on medical schemes and those in households of contributors to social security. This produced the following numbers for those over age 65 and on medical schemes for the costing of the benefit:

- Scenario 1: 587,573 people;
- Scenario 2: 638,150 people; and
- Scenario 3: 702,697 people.

This deliberately produced a very conservative estimate of the cost of the benefit in the One-Year Model. The conservative estimate allows for some considerable increase in the numbers that are admitted to the benefit in the early years. Any risk in the costing is best mitigated by careful attention to the wording of entitlement to the benefit.

It may be advisable to make the benefit payable in full from age 65 only if a person has had a minimum of 5 or 6 years' medical scheme membership in the period from 2000 to the date of switch-on in 2010 or 2012. This will require proof of membership from historical medical scheme records. Attempting to obtain accurate records prior to this time is not worth considering. It was argued earlier that payment should be in full or not at all, rather than having payments linked to years of proven membership.

8.3 Long-term Stability of Funding Costs

The Rusconi Long-Term Model is used to estimate the demographics of the South African population from 2005 through to 2080. The graph below shows the number of pensioners expected in the system if the retirement age were to remain at age 65 for both males and females. We can split the number of pensioners between those at the starting point, some 2.3 million people, and those who retire after 2005. The size of the group that is envisaged could be eligible for immediate funding of post-retirement medical scheme contributions is shown in dark blue on the left-hand side of the graph.

Work still needs to be done to be able to split the future pensioners into those who would be eligible for funding for the balance of PMBs and those who are not eligible. This would require a definition of future eligibility linked in some way to the family of the contributor. The envisaged project on family definition and demographics has not yet begun and a possible definition of eligibility has not yet been determined. The costing in the graph which follows therefore overstates the amount needed as it funds for all people who retire after 2005.

While the absolute level of the funding is too high for new pensioners, the shapes can still provide useful information. At this stage of the modelling what is more important is a decision about whether entitlement to the full balance of PMBs is immediate or whether that entitlement builds up over years of contribution. The dark-blue part is the current pensioners on medical schemes (but generously determined, as discussed in section REF _Ref169430137 \r \h * MERGEFORMAT 8.2). The creamy shape is using full entitlement for every new pensioner and thus follows the shape of increase in pensioners seen in the first of the two graphs above. The red line is the cost of the same group of new pensioners but if entitlement is earned over 30 years of working.

Note that the red line delays the rise in costs as when the social security system starts there is no existing eligibility. Of course policymakers may choose some interim eligibility so that there is not such a long delay in people receiving full entitlement. This report though still recommends that entitlement is in full, rather than to an earned amount, in order to simplify calculations within Social Health Insurance and simplify people's understanding of the benefit.

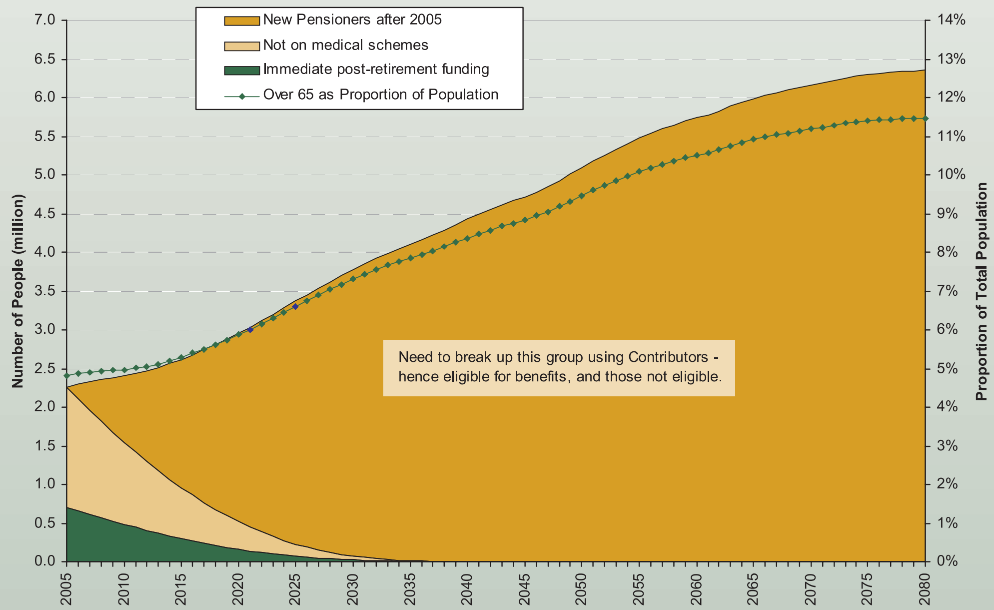

Figure 23: Estimate of Future Pensioners in South Africa
(Source: Rusconi Long-Term Model)

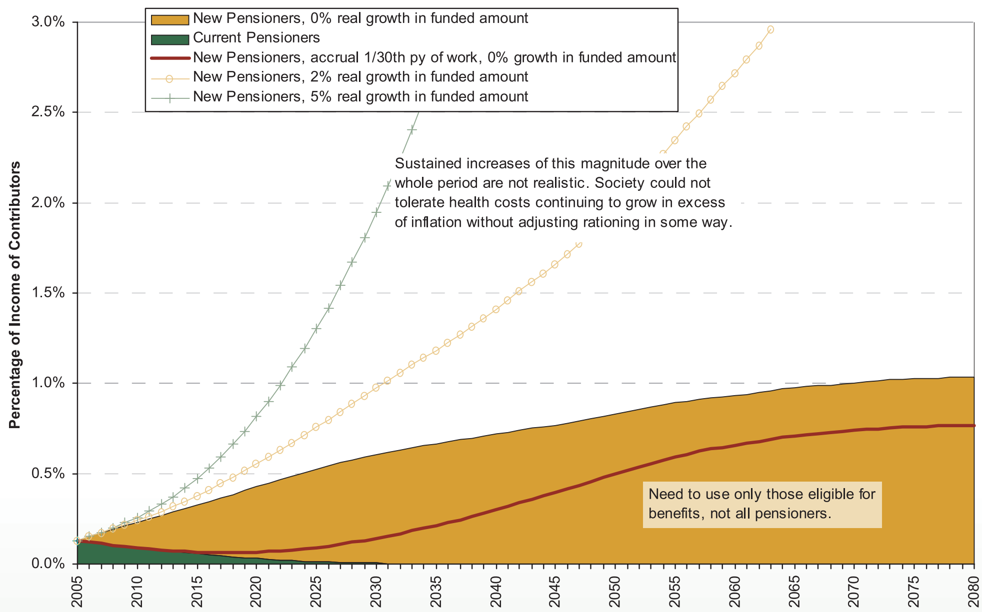

Figure 24: Long-term Cost of Funding Balance of PMBs under Social Health Insurance
(Source: Rusconi Long-Term Model)

As the graphs show, future changes in the number of pensioners do not represent a significant risk to the social security system. The two lines showing the long-term implications of the cost escalating at 2% and 5% above inflation show that this is a much greater risk to the future cost of funding. It is unrealistic, however, to expect that this escalation can continue indefinitely and society would not tolerate those increases in healthcare costs for workers without taking remedial action to ration care in some way.

The other large risk in the current calculations is to the future definition of the PMB package. This issue is taken up again in section 9.3.

9. Implementation Issues

This section identifies five areas that require attention from policymakers or further research.

9.1 Social Security Definitions

It is preferable to have mandatory contributions to health and for post-retirement healthcare funding to use the same income threshold, contributor definitions and methods for determining contributions.

The costing of social security for health in section 5.4 uses a definition of potential contributor and definition of income agreed with other researchers on the retirement reform projects for the Department of Social Development. The table below shows the impact that three different definitions of the contribution can have on the social security contribution for health.

Different definitions of contributions produce different levels of contribution which have an impact on the perception of affordability. More importantly, the different definitions also have equity implications. Definition A in the table above favours low-income contributors, as contributions rise more slowly from the threshold for contribution. Definition B favours high-income contributors, as the cap on total contributions in Rand terms cuts the size of their contributions.

In order to take all the retirement and health reform work further, it is important that alternative definitions be debated and agreed within government and with stakeholders. This will facilitate further detailed costings and planning. Examples of key definitions that require clarity are as follows:

- Whether residence or citizenship will determine eligibility to contribute;
- The inclusion of domestic workers and farm workers as contributors;
- The inclusion of the self-employed;
- The definition of 'family' for further work on death benefits and survivor benefits;
- The definition of income that will be used to determine eligible income for calculating contributions.

Table 5: Impact of definition of Contribution on Social Security Contribution for Healthcare (2005 Rand terms)

		Scenario 1	Scenario 2	Scenario 3
		Contributors are those earning above the tax threshold.	Contributors are those earning above R2,000 pm.	Contributors are those earning above R1,000 pm.
Base Costing in this Report	Number of Contributors	4,781,470	6,040,447	7,950,348
	Total Monthly Income	33,087,509,704	35,880,434,412	38,461,495,087
	Monthly Contributions at 1% of all income from the first Rand	330,875,097	358,804,344	384,614,951
	Social Security Contribution using definition above	**3.1%**	**3.4%**	**3.9%**
Other possible definitions of Contributions	**A: Monthly Contributions at 1% of income above threshold for contribution**	283,060,402	298,399,871	305,111,467
	Social Security Contribution using definition above	**3.6%**	**4.1%**	**5.0%**
	B: Monthly Contributions at 1% of all income with maximum equivalent to R750 at 15% contributions	204,038,236	231,967,483	257,778,090
	Social Security Contribution using definition above	**5.0%**	**5.2%**	**5.9%**

9.2 Sequencing of Healthcare Reform

Healthcare reform has been proceeding since 1994, but reforms to achieve a social security system for health are proceeding slowly. Although the key institutional component of Social Health Insurance is shortly to receive attention in parliament, the most important reforms will be those that involve income cross-subsidies and mandatory contributions. There has been little agreement within government on this next phase of reform and whether it should proceed at the same time as retirement reform.

It is preferable to have mandatory contributions to health at around the same time as mandatory retirement funding, or at least clarity and a firm timetable for the sequencing of reform. There has been noticeably little communication to the industry and the public on Social Health Insurance reform since 2002 and this makes for a difficult environment to plan for the future.

Pensioners are already vulnerable and they will find contributions for healthcare increasingly difficult to afford, as medical-contribution increases continue to exceed pension increases. Added to this is the fact that the structure of employee benefits are changing in such a way that existing pensioners have often had their subsidies ‘bought out’ and very few future pensioners will have any subsidy for health benefits in retirement. The need to act to redress this ‘affordability crunch’ for pensioners is becoming increasingly urgent.

The funding of post-retirement medical scheme contributions for those over age 65 is best achieved as a small addition to the contribution determined for Social Health Insurance, as shown in section 5.4. However, if income cross-subsidies and hence mandatory contributions are substantially delayed, then an alternative means of funding this is needed. One interim step that has not been fully explored is to make contributions for minimum benefits mandatory, but at a flat rate rather than using full income cross-subsidies.

The institutional framework for flat mandatory contributions, including funding for post-retirement healthcare, is shown in Appendix H. However, it was shown in section 3.6 that the more people covered by Social Health Insurance the lower the cost to everyone. This was carried through to Table 4, where the direct costs to members are shown at each period of reform.

If mandatory flat contributions were instituted in Period 3 as soon as the isolated REF becomes operational (Graph H1 in Appendix H), then the amount to be paid by contributors would be R217.99 plus an amount for the post-retirement subsidy. As this period would still have the existing tax-expenditure subsidy, it will be particularly unfair to workers below the tax threshold and mandatory flat contributions would need to be only for those earning above the tax threshold. The cost per existing member of subsidies for the current pensioners is estimated to be an additional R26.79 per working person per month. This would mean a total flat contribution per working person for PMBs of R244.78. This is 312% of the amount needed to be funded for the balance of PMBs under Social Health Insurance. Any attempts to provide for post-retirement subsidies before some income cross-subsidies are introduced are not recommended, as the burden will fall most heavily on the lowest-income people.

If mandatory flat contributions were instituted in Period 4 when the tax subsidy has been replaced with a per capita subsidy (Graph H2 in Appendix H), then the amount to be paid by contributors for the balance of PMBs would be R103.48 plus an amount for the post-retirement subsidy. Assuming flat contributions are only collected from those earning above the tax threshold, then the additional cost of subsidies for existing pensioners is estimated to be R12.72 per working person per month. This would mean a total flat contribution per working person for the balance of PMBs of R116.20. This is only 16% more than the average amount needed to be funded for the balance of PMBs under Social Health Insurance. However, the incidence will fall more heavily on lower-income people unless full cross-subsidies are instituted as envisaged in Period 5.

Both solutions above assume a pay-as-you-go approach to funding for minimum benefits for healthcare for those over age 65. They have also been estimated only for existing pensioners on medical schemes and those in the households of Scenario 1 contributors. If more pensioners are added, as was envisaged in the Scenario 3 costing, then the figures quoted above would increase.

The most effective means of pre-funding for post-retirement medical scheme contributions for those over age 65 is to proceed as fast as possible to full implementation of Social Health Insurance. The additional cost for funding in full for the balance of PMBs for those over age 65 was shown in section 5.4 to be 0.1% of contributions under all three scenarios.

9.3 Definition of PMBs and Desirable Option Designs

With greater clarity on the sequencing of reform for Social Health Insurance, it will become easier to deal with the sequencing issues of reform for medical schemes. A major area of concern in the industry at present is the lack of certainty on the timing and definition of future extensions to PMBs and on the options structures that may be used for benefit design.

Many of the concerns raised with the extension of PMBs are in connection with the impact on low-income workers. There are also concerns over the implementation of the REF in an isolated form rather than in conjunction with a per capita subsidy.

In order to conduct further work on Social Health Insurance costing, it is critical that there be broad agreement on the desirable future definition of PMBs. Even if the extension of PMBs needs to occur sequentially, as broader healthcare reform proceeds, having a common vision of the end goal will substantially reduce confusion and uncertainty. Once the definition of future PMBs is agreed, then the implications for supplementary benefits above the PMBs can be resolved and desirable options structures clarified. This work needs to be performed by the Department of Health and Council for Medical Schemes in conjunction with stakeholders.

9.4 Linkage using a Monthly REF Community Rate

There is a technical issue that arises in the transfer from the central social security retirement fund to the Risk Equalization Fund. When the REF was designed in 2003, it was envisaged that the industry community rate would be held constant for one year at a time. This fitted in neatly with medical scheme pricing, which occurs on an annual basis.

Subsequently, the Ministerial Task Team on SHI reported to the Department of Health[52] recommending that any risk to government should be eliminated by determining the industry community rate for the REF on a monthly basis. That report was not publicly released and there has not been any subsequent technical report on how the monthly community rate would function. There are several issues that need to be addressed, including the means for determining payments for schemes with poor-quality data and how resolution of data problems will be brought into the monthly calculation. Further, there is a timing issue on the reporting of maternity events due to the run-off of claims and the implications of run-off in reporting have not yet been addressed.

More seriously for this work on post-retirement medical scheme funding, having a fluctuating community rate from month to month makes the administration of payment flows much more complex. The diagrams in section 7.2 and Appendix H and the costing in section 5.4 were devised on the basis of a constant amount needed each month.

The use of a monthly industry community rate for the REF is well-suited to the Period 3 reforms with an isolated REF. However, its use begins to be problematic for Period 4 and its use becomes difficult under Period 5 with full income cross-subsidies. Under Social Health Insurance the intention is that income cross-subsidies provide for the difference between the cost of PMBs and the per capita subsidy. Members would only pay directly to their medical schemes the amount needed to cover non-healthcare costs. A monthly fluctuating amount for the value of PMBs is thus problematic.

The cashflows preferably need to be determined annually so that SARS will know the income-related contribution amounts needed for one year at a time. Medical schemes would then also know for one year at a time what additional contribution to charge to members. The post-retirement subsidy could then also be fixed for one year at a time.

It seems to make sense that in Period 5 the REF should pay risk-adjusted amounts depending on the cashflow it receives. The solution to the risk faced by government may be better dealt with by making the payments from the *REF* subject to monthly fluctuation rather than the payments to the *REF*.

This administrative issue needs attention from the Council for Medical Schemes in conjunction with stakeholders in the Risk Equalization Technical Advisory Panel, together with policymakers dealing with health reform and retirement reform.

9.5 Employer Liabilities and Employer Reaction

Employers are still grappling with the implication of the tax-subsidy reforms in 2006 with respect to medical scheme contributions for those in retirement. Tax deductibility in the employer's hands of contribution subsidies paid on behalf of *workers* is clear but the situation for *pensioners*[53] has not been clarified.

This proposed reform of funding for the balance of cost of PMBs for pensioners is complex and wide-ranging. The central funding

[52] Ministerial Task Team on Social Health Insurance (2005) Social Health Insurance Options: Financial and Fiscal Impact Assessment.
[53] Undated letter from Actuarial Society Health Committee to National Treasury at the time of tax-subsidy reforms implemented in 2006.

for those over 65 will reduce the liability of employers for funding medical scheme contributions in retirement. This will reduce both the annual charge to the income statement and the liability on the balance sheet. The likely response of employers will need further testing in discussions with stakeholders.

In principle we would not want this proposed structure to jeopardize any pre-funding for post-retirement medical scheme contributions that is already in place. Even if PMBs become fully paid for those over age 65, the amounts already set aside for pre-funding could assist members to enjoy more comprehensive care until a dispensation of enhanced PMBs is introduced. We need to be wary of the possibility that some consultants and advisers might move swiftly to relieve employers of as much of the remaining post-retirement liability as possible before any reform actually occurs.

It is important that decisions taken by government in this regard are clearly and rapidly communicated. Silence on the issue for several years may have undesirable impacts on pensioners if employers freeze any consideration of dealing with the question of medical scheme subsidies for workers and pensioners. This report thus ends with a plea for openness and transparency in the discussions about social security reform for both retirement and healthcare.

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Appendix A: Healthcare Reform by Function

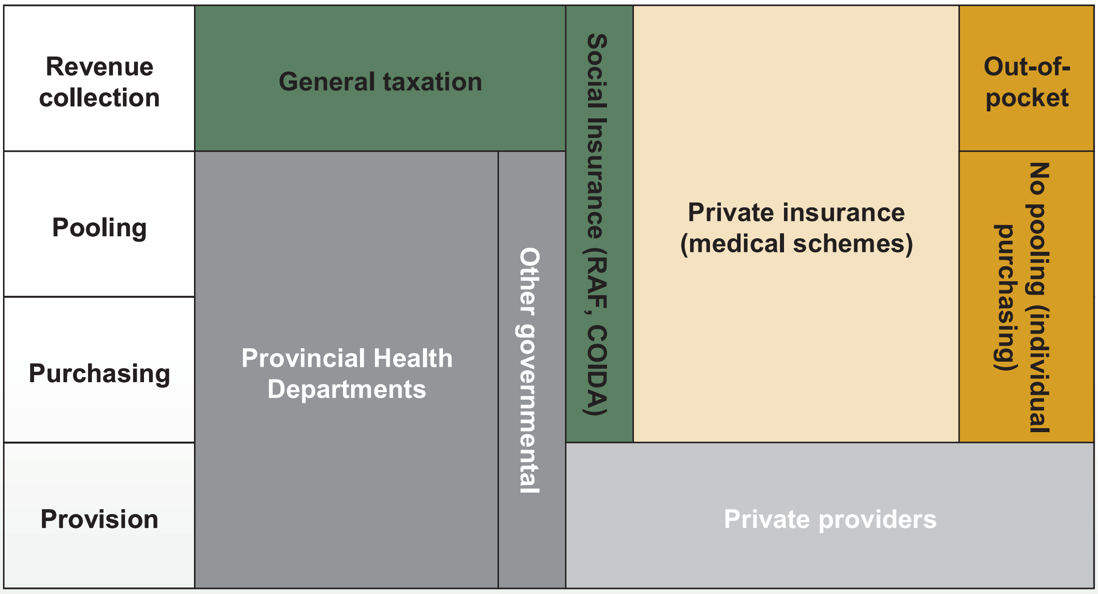

Figure A1: Functions under Current Structure of South African Health System

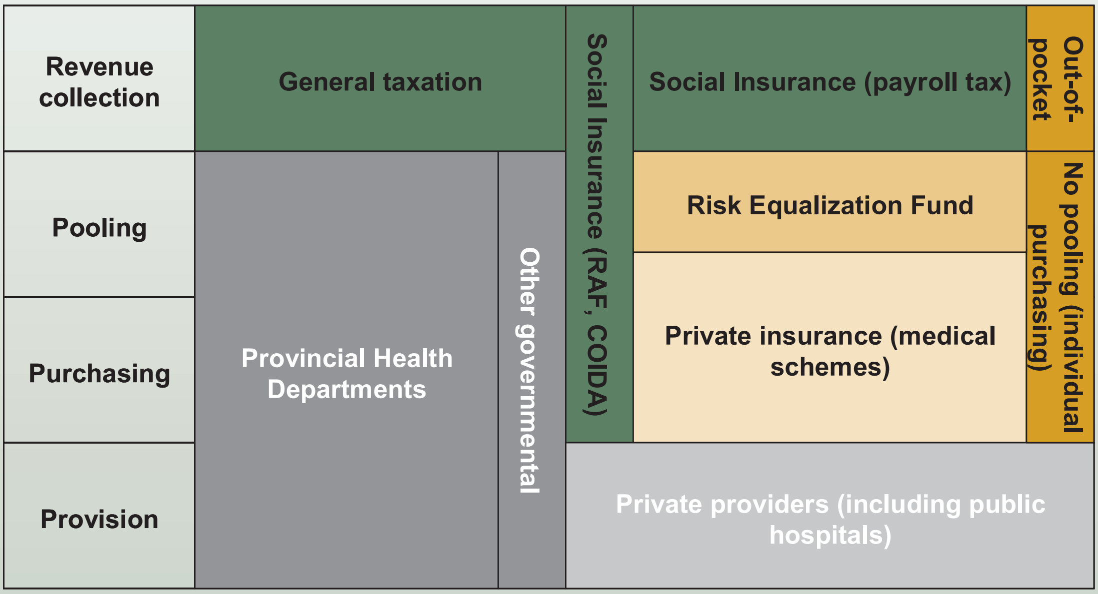

Figure A2: Functions of South African Health System under Social Health Insurance

Appendix A

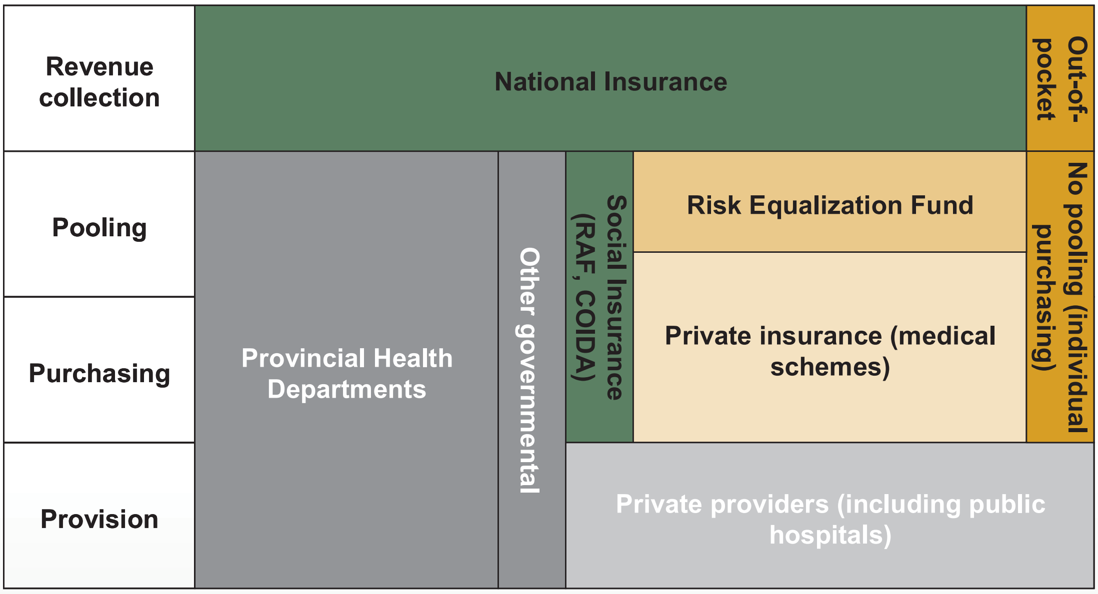

Figure A3: Functions of South African Health System under National Health Insurance

Source: Ministerial Task Team on Social Health Insurance.

Diagrams on the style of Kutzin frameworks as described by the World Health Organization.

Appendix B: Diagrams for Periods in Healthcare Reform

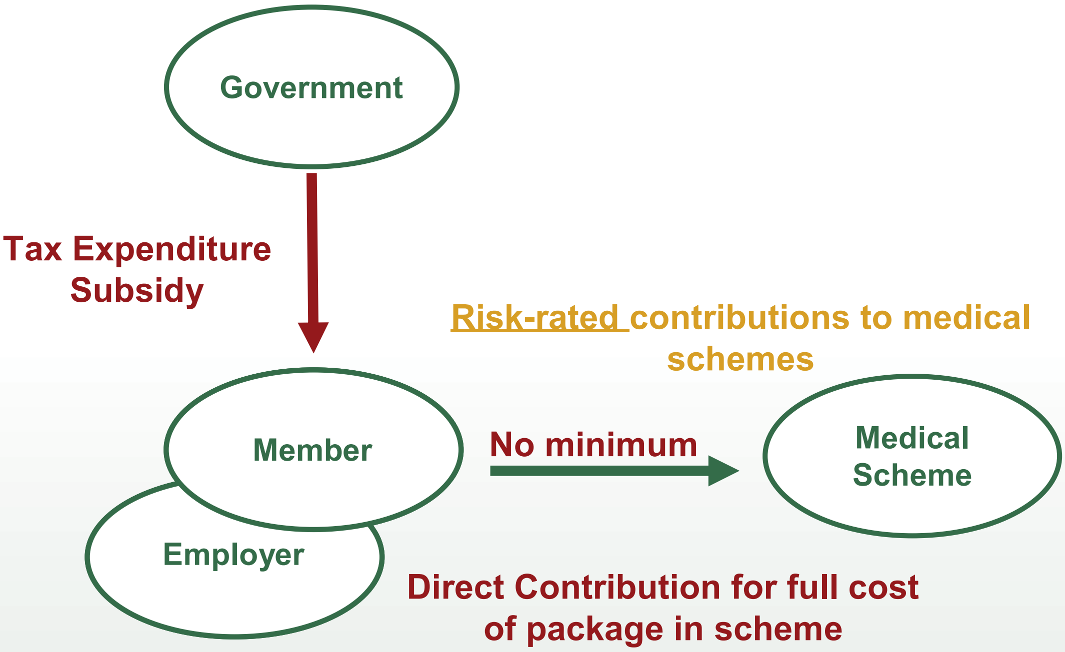

Figure B1: Period 1: 1993 to 2000: Before Reform

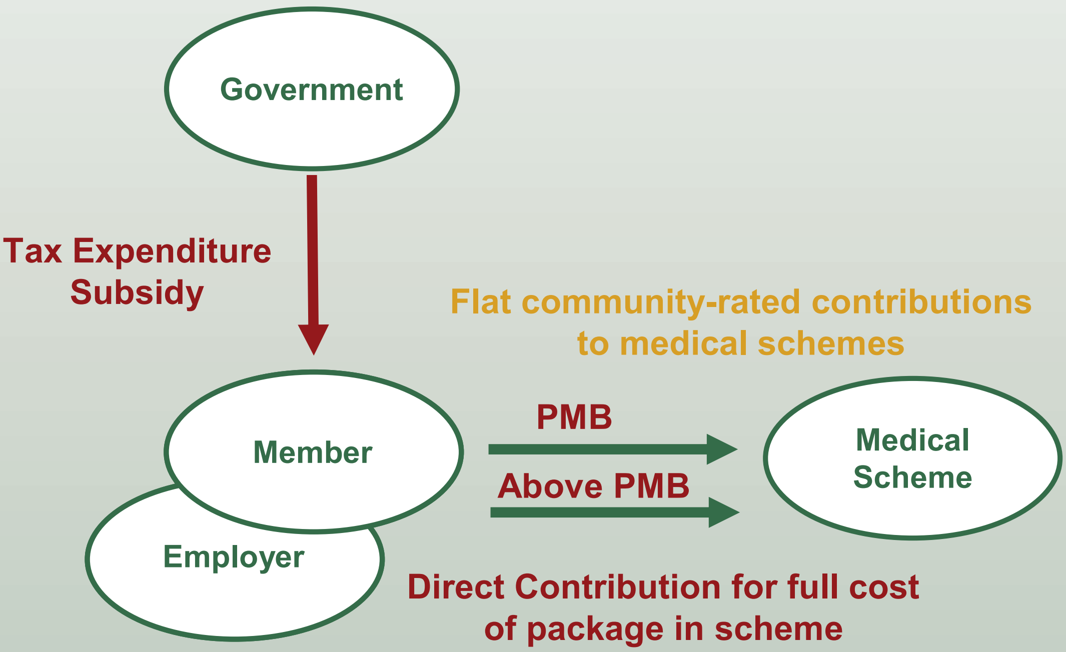

Figure B2: Period 2: 2000 to 2007: Medical Schemes Act

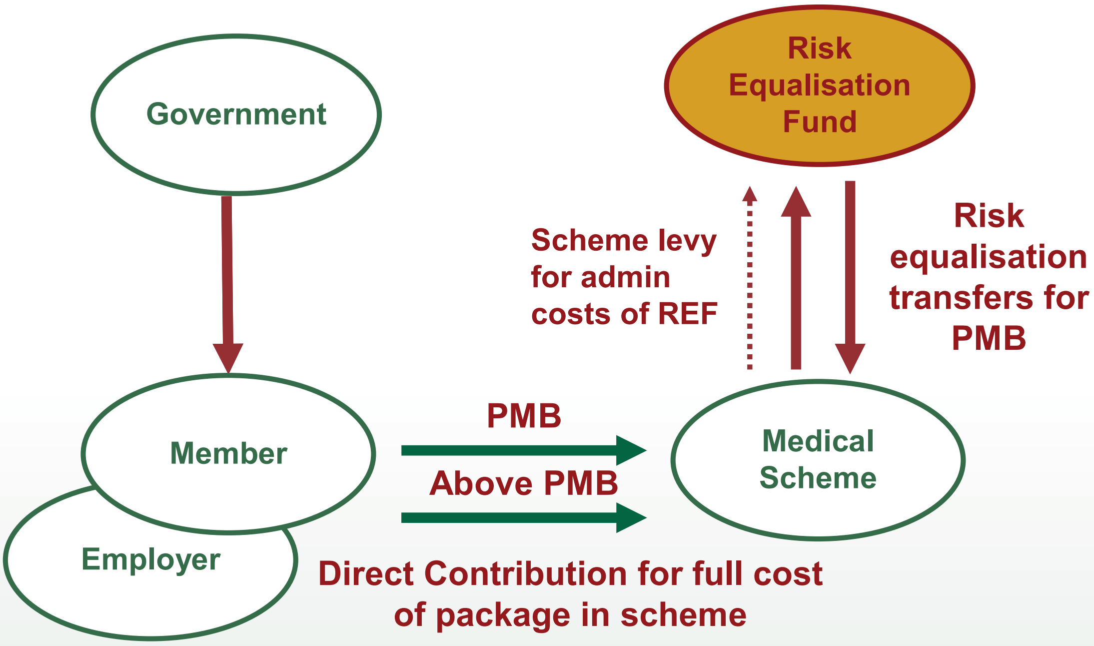

Figure B3: Period 3: Isolated Risk Equalization Fund

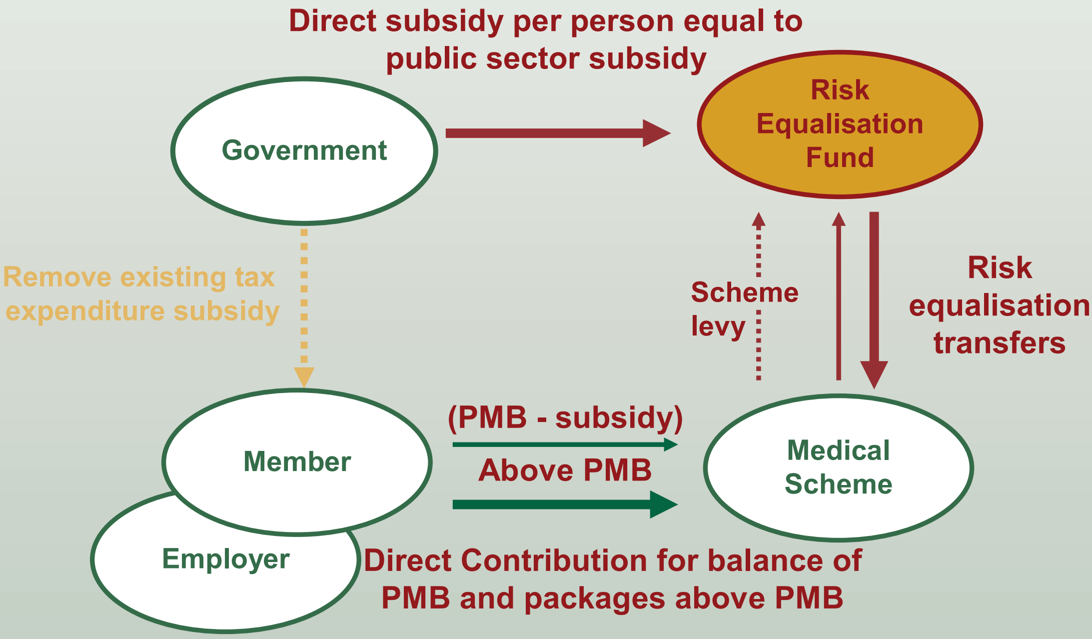

Figure B4: Period 4: Risk Equalization Fund with Per Capita Subsidy

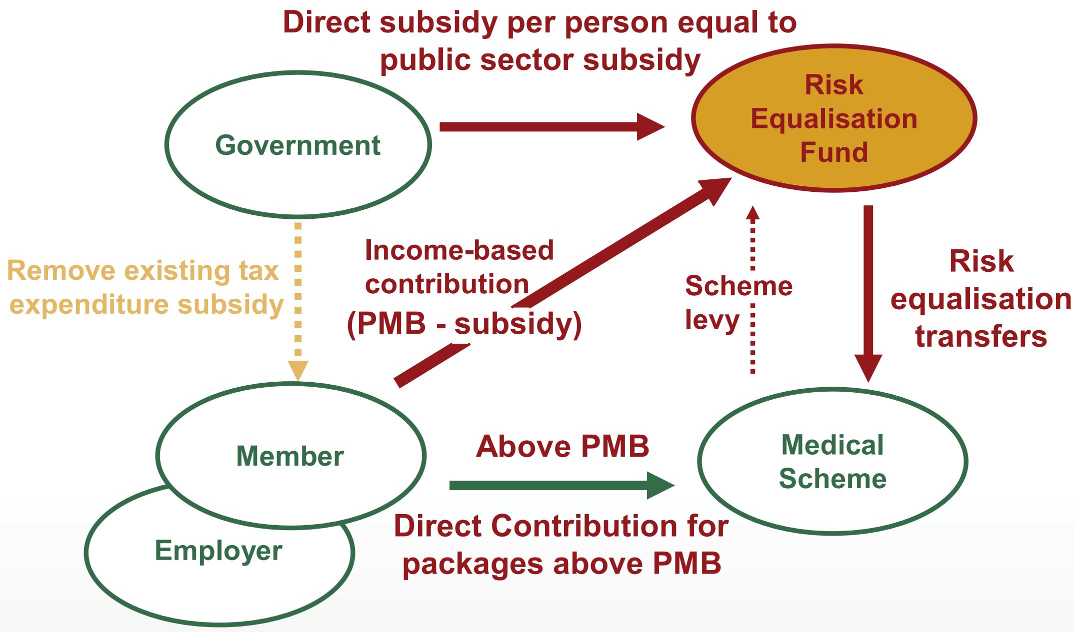

Figure B5: <u>Period 5:</u> Social Health Insurance

Appendix C: Anti-Selection in Medical Schemes

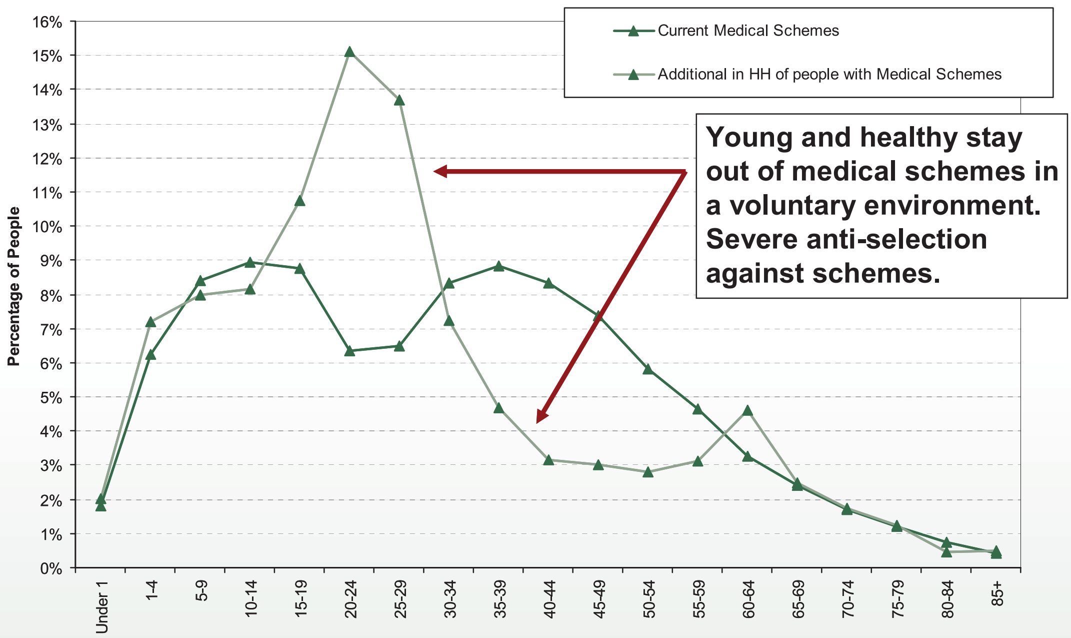

Figure C1: Age Profiles of those currently in Medical Schemes compared to those in same Households but not on any Medical Scheme. (using GHS2005)

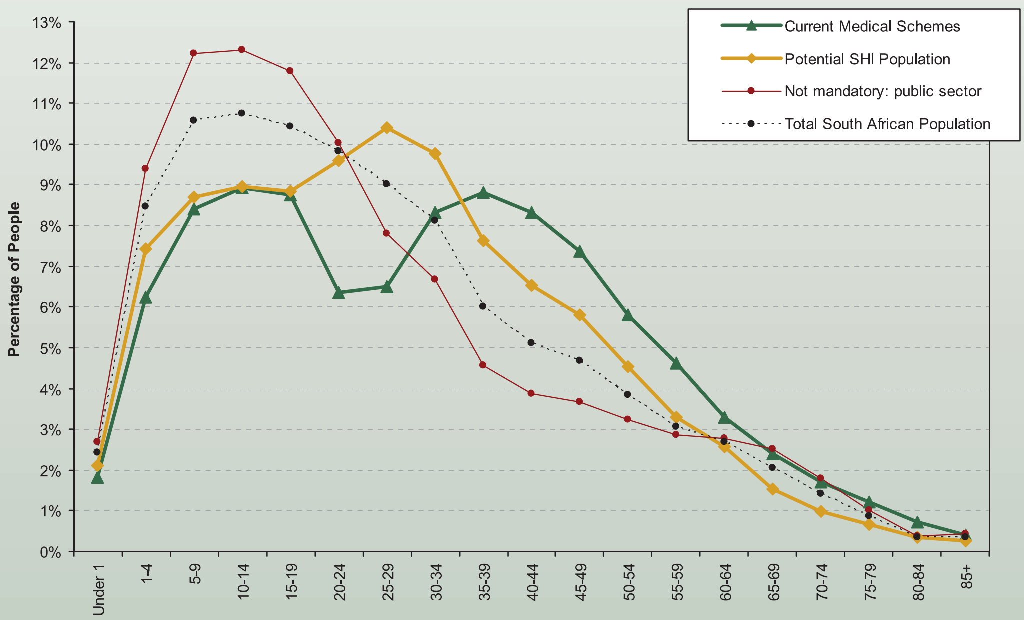

Figure C2: Age Profiles of those currently in Medical Schemes compared to full Social Health Insurance and those remaining in the Public Sector. (using GHS2005)

Appendix C

The first graph above considers the households where there is at least one person already on a medical scheme. The people in those households not on medical schemes are predominantly young adults. Some are studying but others are not yet able to find work. There are far fewer working-age adults not covered and some will be other family members like brothers or sisters. Many medical schemes define 'family' in ways which prevent these lives accessing health cover unless as members in their own right.

The second graph above shows that medical schemes have a 'twin-peak' age profile because many young adult lives who are working have not joined in a voluntary environment. Under SHI covering all in households where someone is working and earning above R1,000, the age profile would be much younger. For interest, the age profile of the public sector is also shown and it has many more children as the lowest-income families tend to be larger.

The gender profile below shows that an excess of females in the child-bearing years are already in medical schemes. The Prescribed Minimum Benefits cover maternity events and many women seek to join medical schemes when contemplating a family.

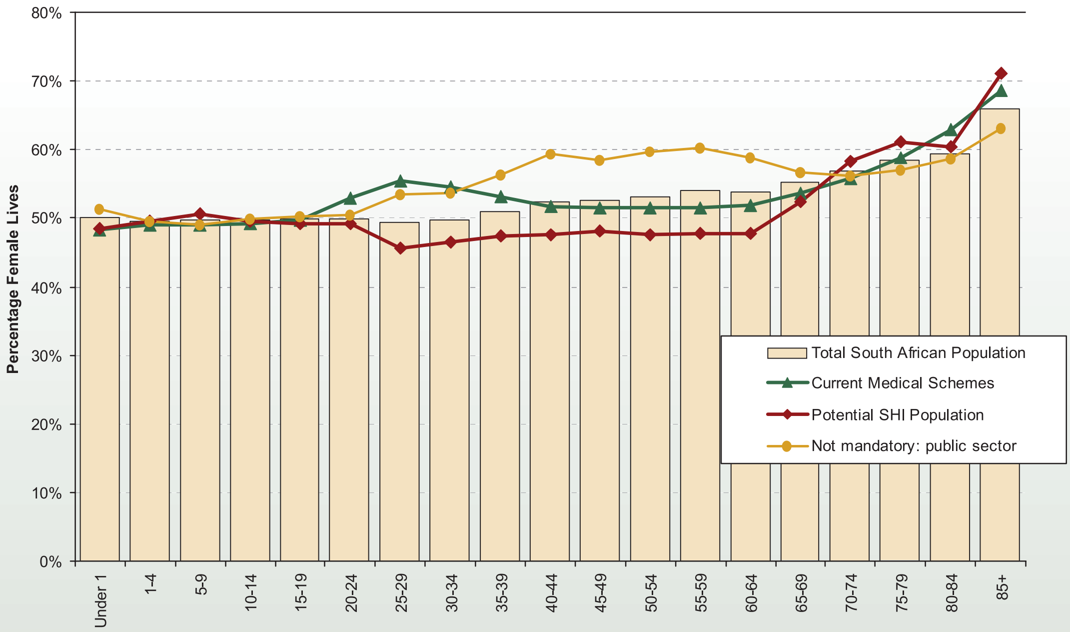

Figure C3: Gender Profiles of those currently in Medical Schemes compared to full SHI and those remaining in the Public Sector. (using GHS2005)

Appendix D

The diagram below draws on the work of Rob Rusconi in developing the structure of the Long-Term Model for the analysis of retirement reform. The One-Year Model developed by Heather McLeod enables more detailed analysis of contributors to social security and possible immediate recipients of benefits. Learnings from the One-Year Model continually feed the scenarios drawn for the Long-Term Model where the long-term stability of the system is then evaluated.

The One-Year Model is particularly useful for elaborating who might contribute, using parameters drawn from the General Household Survey 2005 (from StatsSA and supplied by EPRI for this project). Variables incorporated include age, gender, income, medical scheme membership, disability status, employment status, industry and unemployment. The impact on cashflow of more people becoming employed can be estimated. The One-Year Model is also of particular use in determining the shape of contributions and the equity of different definitions of contributions for social security.

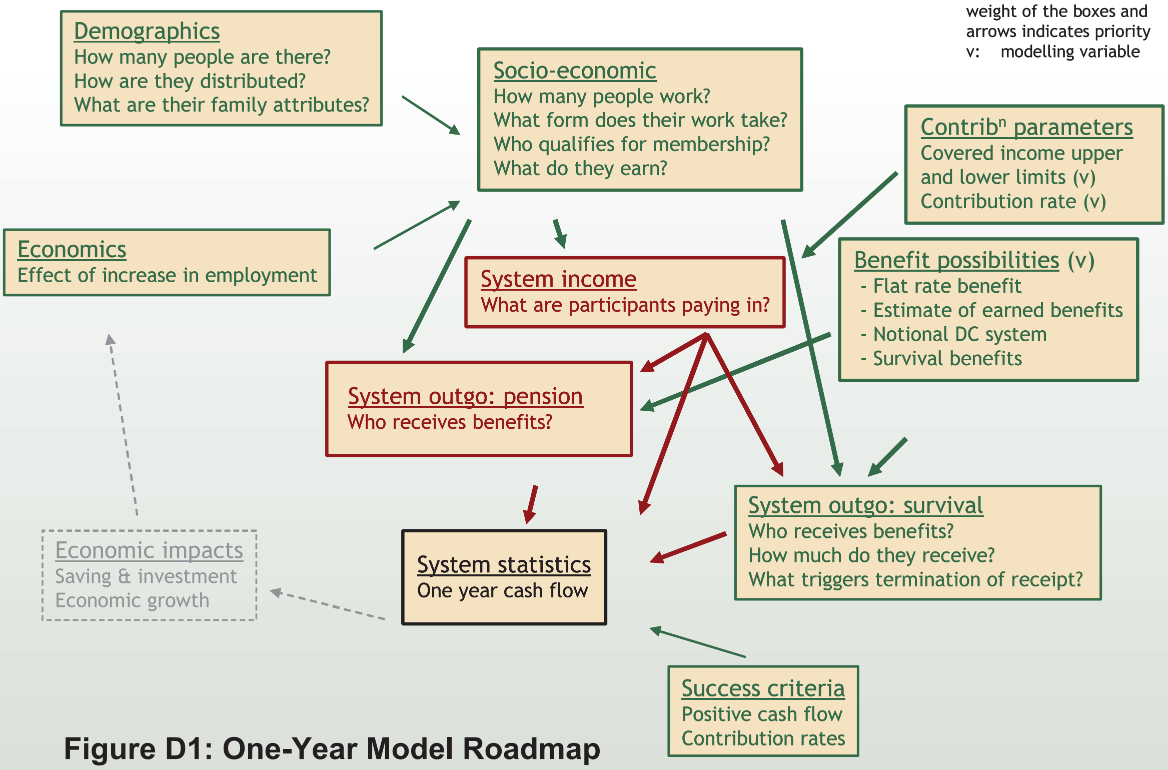

Figure D1: One-Year Model Roadmap

Appendix E

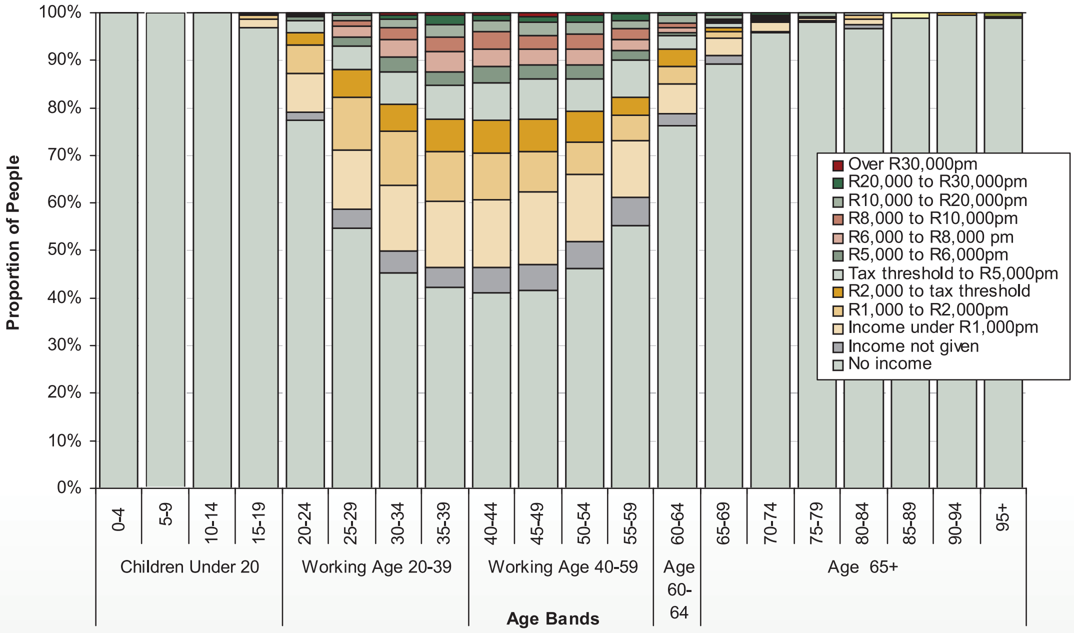

Figure E1: Individual Income in South Africa by Age Bands
(Source: GHS2005)

In the graph below, we attach everyone in the household to the income level of the highest-earning person in that household to obtain a proxy for socio-economic status of the household.

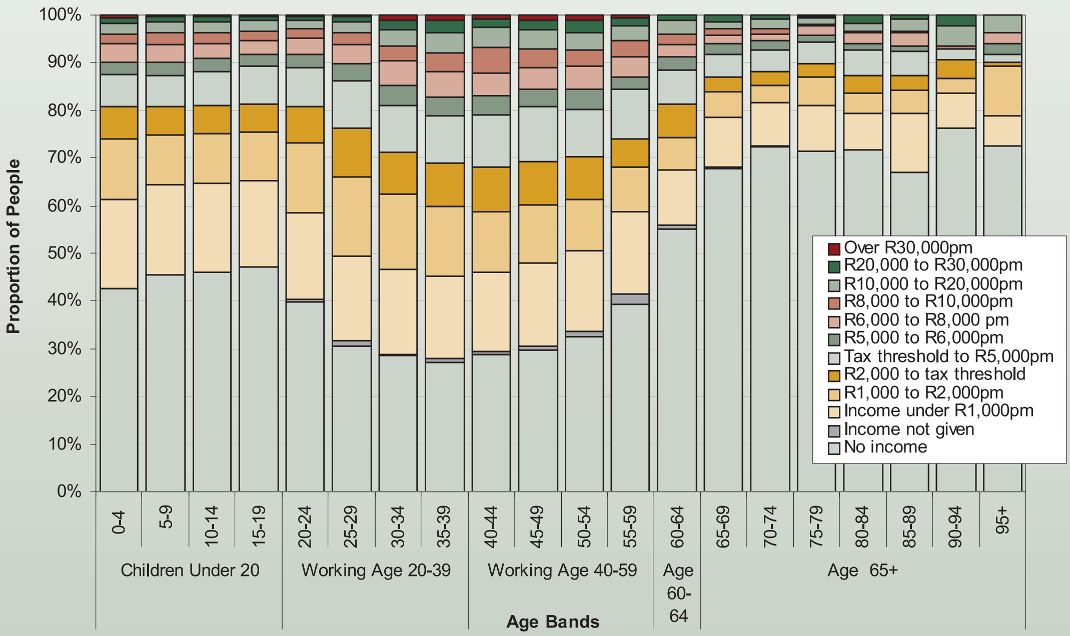

Figure E2: Highest Household Income in South Africa by Age Bands
(Source: GHS2005)

Appendix F

Appendix F: Existing Social Grants by Age Band

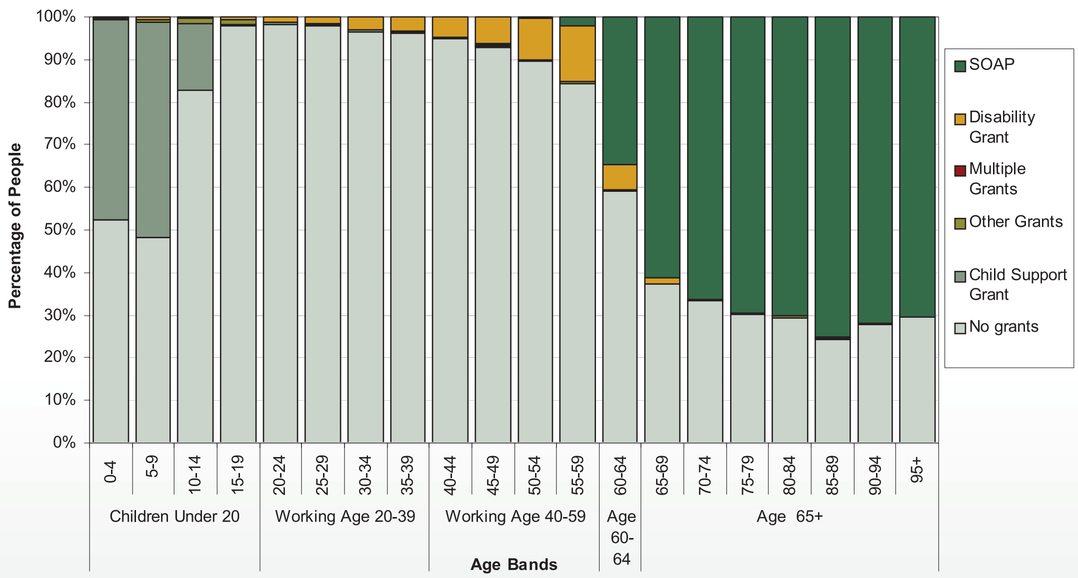

Figure F1: Individuals Receiving Social Grants in South Africa by Age Bands
(Source: GHS2005)

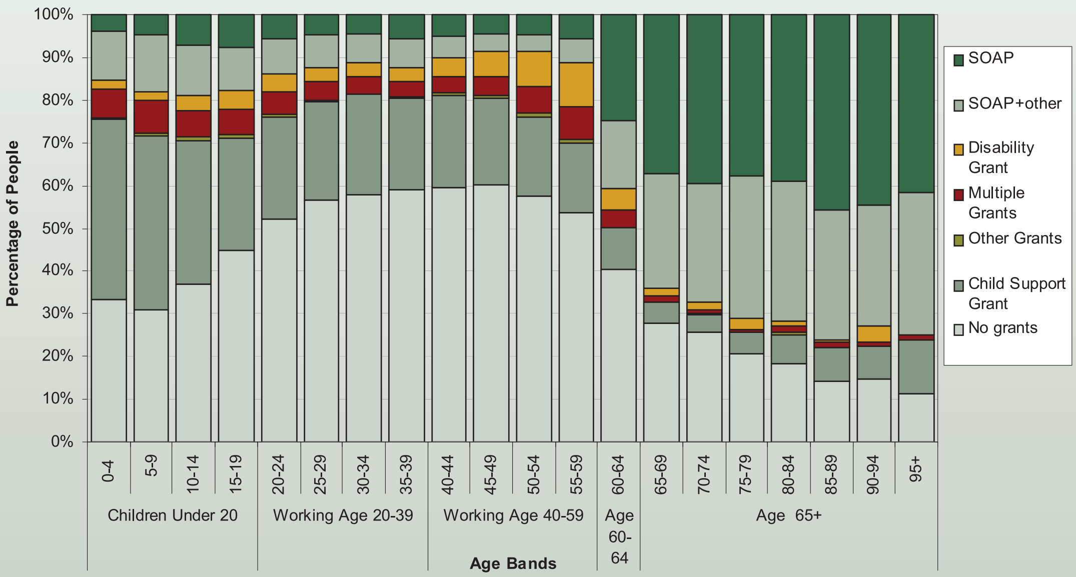

Figure F2: People in Households Receiving Social Grants in South Africa by Age Bands (Source: GHS2005)

Appendix G

Source: Extracted from Council for Medical Schemes (2005) *Requirements for the Full Implementation of a Risk Equalization Fund for South Africa,* Report to the National Department of Health, 4 October 2005.

Figure 16 below indicates that, during the shadow period, schemes are responsible for analyzing data from their beneficiary and claims databases to create REF Grids. The CMS has no control over this process. Should the REF Office institute audit processes to evaluate the creation of REF Grids at scheme level, the process will have to be audited every quarter at each scheme. This is clearly not achievable. The shadow period system therefore does not allow adequate control over data quality and creates an opportunity for fraud.

Figure 16 also demonstrates that, with the use of a central registry, schemes will send their beneficiary data to the central registry. The REF office will have much more control over data quality and will create the REF Grids at a central level. This approach reduces the opportunity for gaming and will allow easier detection of fraud before financial transfers are approved.

Shadow Period without Registry | **Registry for use in Dry Run**

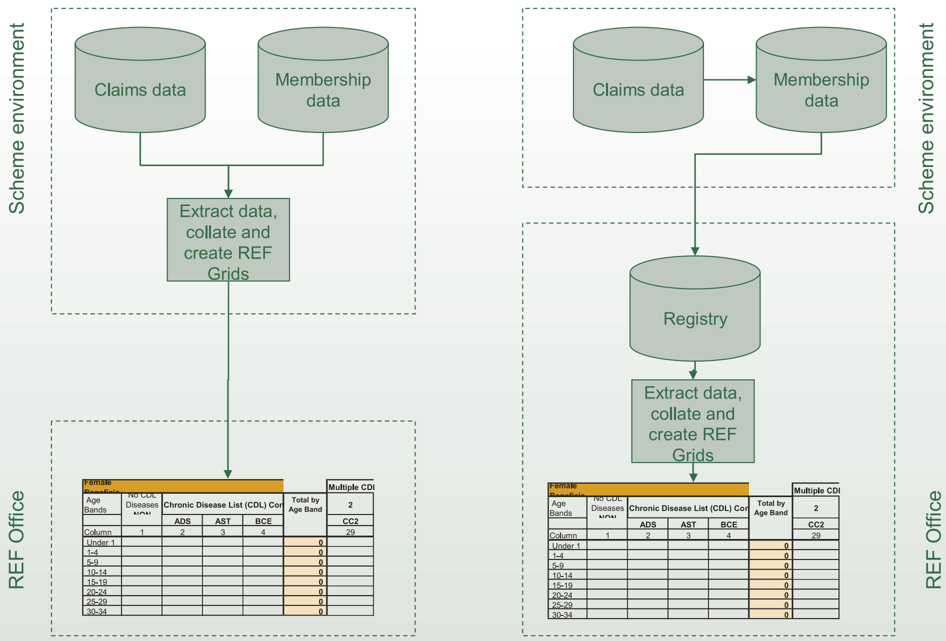

Figure G1: Motivation for a Central Registry

Appendix G

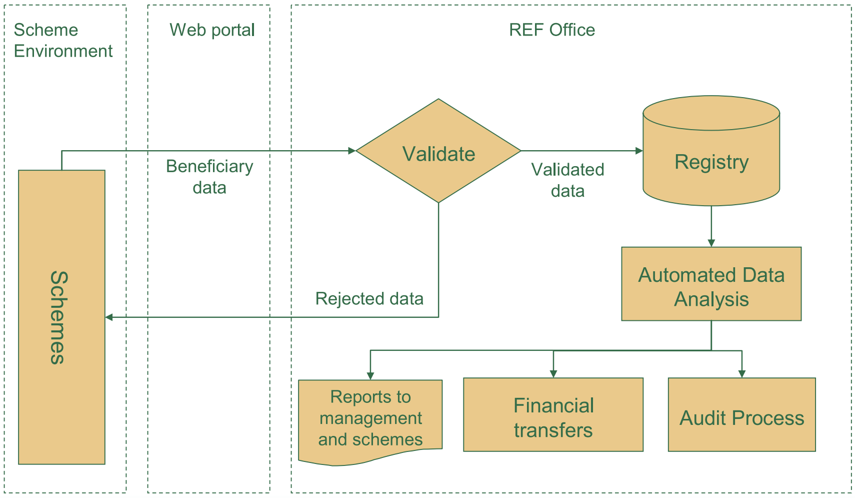

Figure G2: The Design of the Registry

In the schematic presentation of the IT Application in Figure 17 below it is demonstrated that the REF registry will be updated by medical schemes through a secure communication channel (Web-portal). It is proposed that the SARS E-Filing portal is used.

Data submitted by medical schemes will first be stored in a staging area where data will be subjected to a variety of automated rules to check the data for validity. If errors are found in the data, automated messages will be sent to the schemes to correct the data before it is accepted in the registry. The system will also perform checks to ensure that a beneficiary is not registered with more than one scheme simultaneously. If data creates the suspicion of being fraudulent, the audit department will be notified automatically. The registry will integrate with the existing CMS Medical Scheme database.

The use of the IT system to trigger audits and to control the quality of the data in the registry is presented diagrammatically. Based on rules written in the registry, automated reports will be presented to the Audit Department, who will do further analyses and request supporting claims data from schemes if required.

The Registry needs to be populated with data of all beneficiaries before the Dry Run could commence. A systematic approach will be followed to time the receipt of data from the respective schemes. Routine audits will be performed on a systematic manner, as well as in response to suspected data irregularities to ensure that the data on the registry is properly maintained.

Appendix H: Institutional Framework Mandatory Flat Contributions

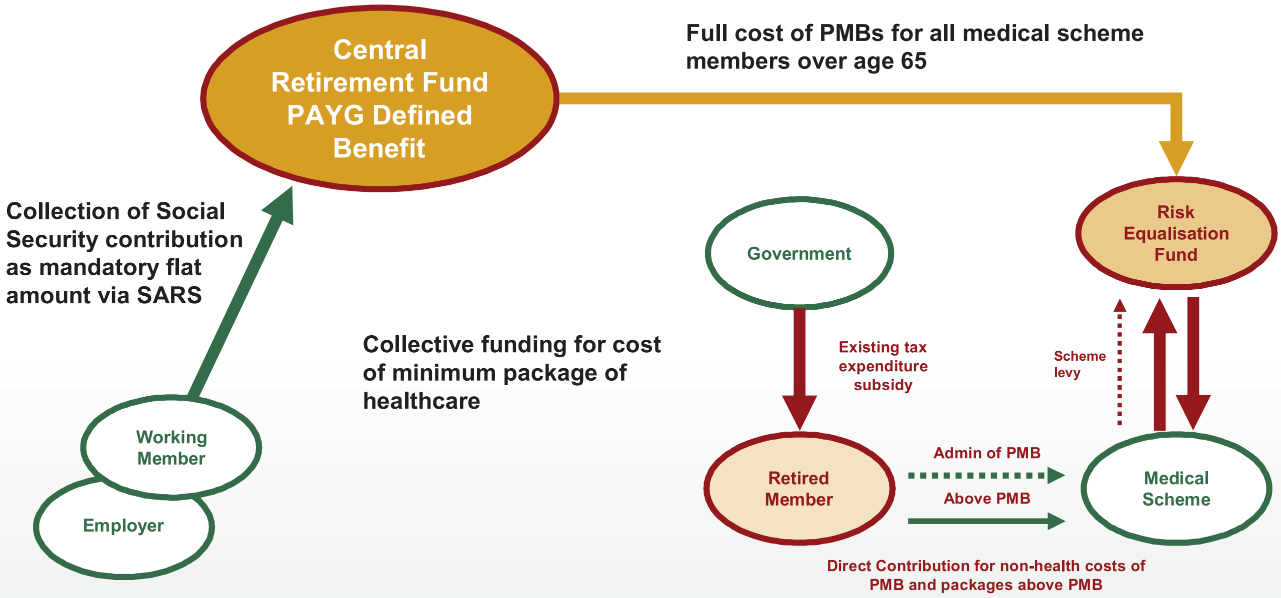

Figure H1: Institutional Framework for Minimum Benefits for Healthcare after Retirement for Period 3 with Mandatory Flat Contributions
[Full amount for PMBs]

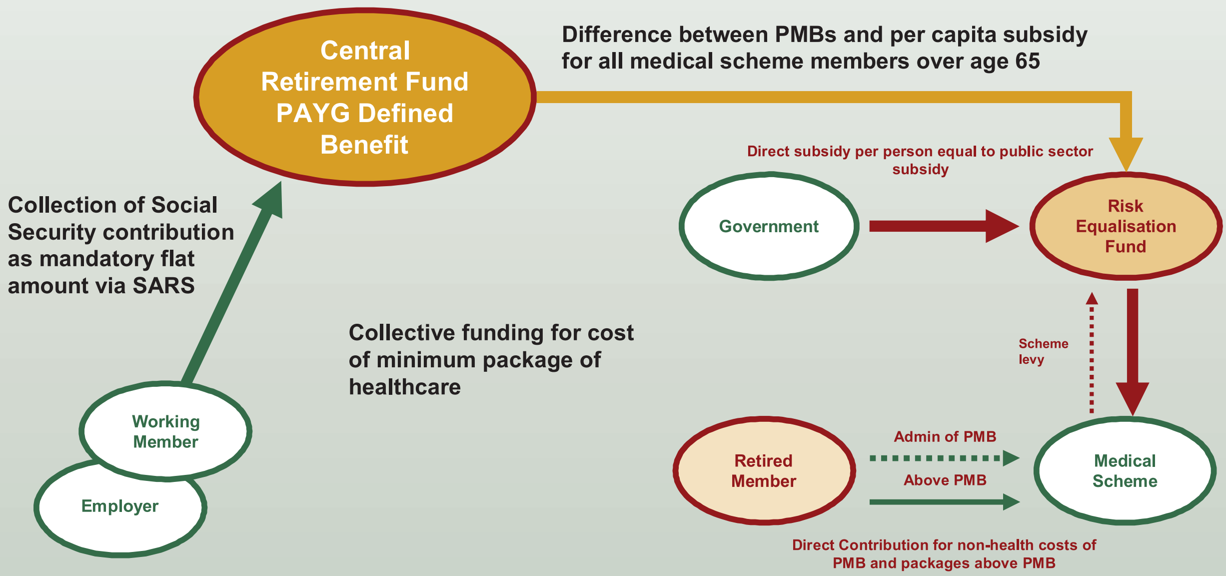

Figure H2: Institutional Framework for Minimum Benefits for Healthcare after Retirement for Period 4 with Mandatory Flat Contributions
[PMBs less per capita subsidy]

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(Produced by Internal Communication)

ISBN No. 978-0-621-37313-4