

**A critical evaluation of the justification
of discrimination in risk underwriting
in the life insurance industry in South Africa**

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Declaration

By submitting this thesis electronically, I, Andries Francois Marais, declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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April 2019

Abstract

Although discrimination based on factors such as age, sex, socio-economic class and health status is normally prohibited by law, such discrimination is an accepted practice in the risk assessment of life insurance underwriting.

Social insurance schemes can survive with no risk assessment because participation is compulsory and universal. Voluntary private insurance, however, can only function if cross-subsidies between participants are reduced to a minimum, by stratifying the risk pool into homogeneous risk groups based on the underwriting factors.

The insurance industry normally justifies its 'right to underwrite' using the arguments of actuarial equity and economic necessity. The purpose of this study is to consider the ethical justification of risk discrimination in underwriting. Unique features of life insurance, like risk pooling, mutuality, cross subsidies, adverse selection and *uberrima fides* must be understood in the process.

Private insurance is a non-primary social good and not a mere commodity, and as such most people should have reasonable access. Premium discrimination based on socio-economic differences is prominent in the South African life insurance industry and is difficult to defend ethically.

Scanlon's theory of moral contractualism provides an appealing lens for considering the reasons for and the justification of premium discrimination in life insurance. At the core of Scanlon's theory is his definition of moral wrongness, based on the concepts of reasons and justifiability. Unlike utilitarianism, with its one central moral value of well-being, moral contractualism can accommodate a plurality of ethical notions within its unified normative domain of justifiability. A tool based on the concept of common good, to combine conflicting modes of justification from different worlds, was utilised in this analysis. These worlds include the industrial world, the marketplace, the civic world and the world of opinion.

The challenge of the study was to define contractualist principles for premium discrimination which can be justified on grounds that no one can reasonably reject. The *Insurance Solidarity Principle* provides justification for the lack of risk discrimination in social insurance. For private insurance, the *Fair Lottery Principle* provides justification for the need for discrimination in underwriting and the fairness of actuarial equity.

Building on this, the *Fair Discrimination Principle* is used to consider justification for the contribution of each specific underwriting factor towards improving actuarial equity. The principle

requires reliability in the statistical evidence, unambiguity in the risk allocation and reasonableness of the causal explanation of each risk factor.

On this basis, the underwriting factors of age, sex and smoking status can be justified as fair discrimination. Socio-economic underwriting, however, does not meet the principle criteria of unambiguity, even though it contributes significantly to actuarial equity.

No change in underwriting practice can be expected without legislative pressure. The thesis concludes with a plea to government, based on the Insurance Solidarity Principle, to create a compulsory social funeral insurance scheme for everybody, with no underwriting requirement and no discrimination.

Key words: life insurance, underwriting, discrimination, solidarity, mutuality, actuarial equity, moral contractualism, principles, justifiability, socio-economic underwriting.

Opsomming

Diskriminasie op grond van faktore soos ouderdom, geslag, sosio-ekonomiese klas en gesondheidstoestand word normaalweg deur wetgewing verbied, maar in die onderskrywing van risiko in die lewensversekeringsbedryf is dié tipe diskriminasie aanvaarde praktyk.

Maatskaplike versekeringskemas is volhoubaar sonder enige risiko-onderskrywing, omdat deelname verpligtend en universeel is. Private versekering kan egter slegs funksioneer indien kruissubsidiëring tussen deelnemers tot die minimum beperk word deur die totale versekeringspoel te verdeel in groepe met homogene risiko, op grond van die onderskrywingsfaktore.

Die versekeringsbedryf regverdig normaalweg sy ‘reg tot onderskrywing’ met die argumente van aktuariële ekwiteit en ekonomiese noodsaak. Die doel van hierdie studie is om te oorweeg of risiko-diskriminasie in onderskrywing eties geregverdig kan word. Unieke eienskappe van lewensversekering, soos die poel van risiko’s, onderlingheid, kruissubsidiëring, anti-seleksie en *uberrima fides* word in die proses verduidelik.

Private versekering is nie ‘n blote kommoditeit nie, maar ‘n nie-primêre maatskaplike produk en as sodanig behoort die meeste mense redelike toegang daartoe te hê. Premie-diskriminasie op grond van sosio-ekonomiese verskille is prominent in die Suid-Afrikaanse lewensversekeringsbedryf maar is moeilik eties regverdigbaar.

Scanlon se teorie van morele kontraktualisme bied ‘n aantreklike lens vir ‘n ondersoek van die redes vir en die regverdiging van premie-diskriminasie. Die kern van Scanlon se teorie is sy definisie van morele verkeerdheid, wat gegrond is op die konsepte van redes en regverdigbaarheid. Anders as utilitarisme, wat op slegs een sentrale morele waarde – welstand – rus, kan morele kontraktualisme ‘n pluraliteit van etiese oorwegings binne die saambindende normatiewe domein van regverdigbaarheid akkommodeer. ‘n Hulpmiddel wat die konsep van gemeenskaplike voordeel gebruik om teenstellende modusse van regverdiging uit verskillende wêrelde te kombineer, word in die analise benut. Dié wêrelde sluit in die markplek, die industriële wêreld, die burgerlike wêreld en die wêreld van opinies.

Die uitdaging wat in die studie aangepak word, is om kontraktualistiese beginsels vir premie-diskriminasie te definieer, wat geregverdig kan word op ‘n grondslag wat nie redelikerwys verwerp kan word nie. Die beginsel van “Insurance Solidarity” verskaf regverdiging vir die totale gebrek aan risiko-diskriminasie by maatskaplike versekering. In die geval van private versekering verskaf die

“Fair Lottery” beginsel regverdiging vir die noodsaak van diskriminasie in onderskrywing en die billikheid van aktuariële ekwiteit.

Die beginsel van “Fair Discrimination” bou dan hierop voort en word gebruik om regverdiging vir die bydrae van elke spesifieke onderskrywingsfaktor tot aktuariële ekwiteit te ondersoek. Dié beginsel vereis die betroubaarheid van statistiese bewyse, die eenduidigheid van risiko-allokasie en die redelikheid van die oorsaaklike verklaring van elke risikofaktor.

Op hierdie grondslag kan die onderskrywingsfaktore van ouderdom, geslag en roker-status as regverdigbare diskriminasie beskou word. Sosio-ekonomiese onderskrywing voldoen egter nie aan dié beginsel se vereiste vir eenduidige allokasie nie, al maak dit ‘n beduidende bydrae tot aktuariële ekwiteit.

Geen verandering aan die onderskrywingspraktyke kan verwag word in die afwesigheid van druk deur die wetgewers nie. Die tesis sluit af met ‘n pleidooi aan die owerhede, gegrond op die beginsel van “Insurance Solidarity”, om ‘n verpligte maatskaplike begrafnisversekeringskema te skep vir almal, sonder enige onderskrywingsvereistes en sonder enige diskriminasie.

Sleutelwoorde: Lewensversekering, onderskrywing, diskriminasie, solidariteit, onderlingheid, aktuariële ekwiteit, morele kontraktualisme, beginsels, regverdigbaarheid, sosio-ekonomiese onderskrywing.

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List of acronyms and abbreviations

ASSA	Actuarial Society of South Africa
CSI	Continuous Statistical Investigation
FAIS	Financial Advisory and Intermediary Services
FSCA	Financial Sector Conduct Authority
GDP	Gross Domestic Product
HIV	Human immunodeficiency virus infection
LGBT	Lesbian, Gay, Bisexual, Transgender
LTI	Long-term Insurance
NSSF	National Social Security Fund
PA	Prudential Authority
SARB	South African Reserve Bank
TFC	Treating Customers Fairly
UK	United Kingdom
USA	United States of America

CHAPTER 1

PREMIUM RATE DISCRIMINATION IN LIFE INSURANCE

1.1. PURPOSE OF THE STUDY

Discrimination in the premium rates charged by life insurers for distinct categories of clients and different individual clients on the same life insurance product is an accepted practice in the life insurance industries in developed countries. The process by which the discrimination is done is called underwriting, which is the process of assessing the risk of each individual applicant to ensure that the premium rate charged for the life cover is proportionate to the expected mortality risks of the applicant. The concept of actuarial equity dictates that people with similar mortality risk (i.e. similar probability of dying) should pay similar premium rates and that people with different mortality risk should pay different premium rates.

The actuarial rationale of rate discrimination is likely to appear reasonable and acceptable to most rational observers. However, when the extent of discrimination, the criteria used for discrimination, and the characteristics of the people most negatively affected by the discrimination are considered, many observers may judge many aspects of the practice to constitute unfair discrimination.

I have spent much of my career as an actuary in life insurance product development, directly involved in the actuarial determination of premium discrimination. The purpose of this study was to reflect critically on the established underwriting practices used for individual life insurance products, with the focus on the South African insurance industry, and to consider the ethical fairness and justification of the discrimination inherent in the process. The study attempted to denaturalise the accepted practices in the insurance industry and to encourage critical introspection of unquestioned ideas, particularly by the actuarial profession in whose domain this issue resides. The study also considered alternative approaches where current underwriting practices may seem difficult to justify.

1.2. THE PROBLEM: EXTREME DIFFERENCES IN PREMIUM RATES

The following is a comparison between the cover provided by a representative life insurance company in South Africa¹ to three different applicants on the same individual life insurance product.

¹ Most figures in this study are based on quotations obtained from Sanlam Life, a leading life insurance company in South Africa. Premiums for life insurance products may differ between companies, just as the price of apples differ between various supermarkets. However, in the competitive South African life insurance market, premiums for similar products are very comparable.

For a premium of R100 per month,² the insurer provides fully underwritten life cover of

- *R22 000 to an old, uneducated, low income male smoker*
- *R150 000 to a middle-aged, mid-income male smoker with tertiary education*
- *R1000 000 to a young, professional, high income female non-smoker.*

For the same premium, the privileged young woman effectively gets almost seven times more life cover than the average middle-aged man, who in turn gets seven times more cover than the underprivileged old man. The rich young woman gets almost 50 times more life cover than the poor old man, for the same premium on the same product.

This extreme difference in benefits provided to different clients for the same price on the same product is likely to be considered as blatantly unfair and discriminatory by many reasonable observers. For this study, all the factors contributing to such differences were considered in detail. In the following chapters, they are described, quantified and qualified, after which the actuarial and ethical justification of each factor are considered.

The questionability of the discrimination is increased by the fact that the privileged rich, young and healthy in the population seem to benefit from it at the expense of the underprivileged poor, old and sick. This runs counter to the generally accepted approach in civilised communities of discrimination in favour of the needy, such as that the rich should pay higher taxes than the poor (with progressive tax rates) and the old and the sick should receive more subsidies and grants. The same concept is contained in the Difference Principle of John Rawls. Rawls forwards two principles: The first is the Equal Liberty Principle, which states that all people are entitled to the most extensive system of equal basic rights, compatible with the rights of all. The second principle consists of two parts: The Fair Equality and Opportunity Principle, which states that posts and positions should be open to all individuals regardless of race, sex or background; and the Difference Principle, which requires that “all social primary goods...are to be distributed equally unless an unequal distribution ...is to the advantage of the least favoured” (Rawls, 1971:303). The underwriting approach of the insurance industry therefore seems to be in direct opposition to the Difference Principle.

For life insurance, however, the underprivileged generally represent a much higher mortality risk than the privileged, and the ability to differentiate between different risks is argued to be essential for the

² In comparing the value for money of products, the normal approach is to consider the difference in price for the same quantity of product. In this study, the comparison is between the quantity of the product that can be purchased for a given price (i.e. the amount of life insurance provided for a given monthly premium). For convenience and ease of reading, most figures are rounded and approximate.

industry to function effectively in a free, competitive market. In terms of actuarial equity and economic necessity it is therefore important for the industry that such discrimination should be accepted by the public and allowed by the regulators, and should not be considered to constitute unfair and unacceptable discrimination.

1.3. THE RACIAL CONTEXT OF PREMIUM DISCRIMINATION

The life insurance industry in South Africa is highly developed and forms an important part of the sophisticated financial services industry in the country, which has a world-wide reputation for quality and financial soundness. According to Munro and Snyman (1995:127), “the assets of life insurance companies and pension funds correspond to well over 80% of gross domestic product (GDP)” which is “higher than that of the United States or Canada”. Even more significant is that “South Africa has the highest in level of life insurance premiums ... to GDP in the world, with total life premiums amounting to 10,3% of GDP”.

Since the establishment of the first mutual life insurance society³ in South Africa in 1845, the industry has developed as part of the high-income (‘First World’) economy in the country. For many decades its target market has been mainly the middle- and higher-income groups of the population, which (during most of the last century) implied a strong leaning towards the white population.

There has been a steady growth in the financial importance of black purchasing power in the country: in 1970 the non-white population groups received only 33% of the total income while in 2000 this figure had increased to 51% (Van der Berg, 2010:10). As a result, the insurance industry has been expanding significantly into that part of the market over the last number of decades, which has resulted in an increase in the heterogeneity of the insured population.

In the South African population, with its many race groups and very divergent levels of income, the nature of rate discrimination in the life insurance market is more extensive than in many other countries with more homogeneous populations. Although there is no specific racial distinction in underwriting, a substantial aspect of discrimination by the life insurance industry, namely the socio-economic discrimination based on income and education levels, is highly correlated with racial grouping. For example, in 2012 the respective mean income of the African, Coloured, Asian and White population groups was R5 400, R7 100, R11 700 and R16 600 (Isaacs, 2016:7). While the apparent race-related discrimination has not created any significant public disapproval or problems

³ The Mutual Life Association of Cape of Good Hope, which became the Old Mutual, one of the leading South African insurance companies.

for the life insurance industry, the situation may well change. This may become a contentious issue in the politically sensitive environment of the country if socio-economic underwriting is viewed as a proxy for racial discrimination, which may have significant repercussions for the life insurance industry.

Public opinion on what is considered fair and just can differ significantly between societies and these perceptions may change over time. Many well-established traditions, practices and concepts have lately come under public scrutiny (sometimes even violent attack) in the increasingly volatile socio-political environment in the country. What may have been considered fair discrimination by most people for a long time, or may have passed largely unnoticed by political activists, may come under public scrutiny and may be attacked as unfair discrimination in future.

Over time the word *discrimination* has largely come to be understood as *unfair discrimination* and the concept of *fair discrimination* is often seen as an oxymoron.

The first meaning provided by the Oxford Dictionary for the noun *discrimination* reflects this view: “the unjust or prejudicial treatment of different categories of people or things, especially on the grounds of race, age, or sex (as in ‘victims of racial discrimination’)”. Synonyms provided, such as prejudice, bias, bigotry, intolerance, narrow-mindedness, unfairness, inequity and favouritism, tend to convey the same negative message.

In a more technical sense, the word discrimination is neutral as is reflected by the second meaning provided by the Oxford Dictionary: “recognition and understanding of the difference between one thing and another (as in ‘discrimination between right and wrong’)”. The synonyms such as discrimination, distinction, discernment, judgement, perception and astuteness carry a positive interpretation. In this context, the idea of not discriminating where necessary may be considered as negative, in the sense of being indiscriminate.

In this thesis, the term ‘discrimination’ is used in its neutral sense, to be qualified as ‘fair discrimination’ or ‘unfair discrimination’ as justified by the context.

1.4. ACTUARIAL, ECONOMIC AND ETHICAL JUSTIFICATION

The actuarial rationale for the discrimination in premium rates is that it is intended and required to reflect differences in the underlying mortality risk of the insured lives. The process of insurance underwriting involves discrimination between groups of people and between individuals, based on a risk assessment. Insurers use actuarial evidence and medical knowledge to support sensible underwriting decisions based on sound statistical analysis of relevant risk factors. This allows insurers

to charge the actuarially ‘correct’ rate for each life insured, i.e. higher rates for higher risk participants and lower rates for lower risk participants. Insurers can therefore offer more competitive rates to the more attractive lower risk participants, while charging higher rates for the less attractive high-risk participants.

In their 2012 publication, *The Right to Underwrite*, CRO Forum⁴ states that “a failure to recognize the differences in risk presented by individuals and to control them through underwriting measures or price variation can lead to adverse selection (riskier individuals purchasing more insurance, and less risky individuals purchasing less insurance)” and such a development in the purchase of insurance “could affect the underlying pool of risks such that average claim levels increase”. The purpose of sound discrimination in premium rates is to ensure that the pricing of the life cover products is financially sound, which is a requirement of the regulatory authorities. Financially sound pricing is required to ensure the profitability of life insurance companies, which is ultimately necessary for their financial survival.

The economic justification for premium discrimination is that it is essential for the financial survival of insurers in a competitive marketplace. While this may be true for a factor such as age discrimination, it is not necessarily true for all aspects of premium discrimination. This is evident from the fact that, after legislation against sex discrimination was introduced in the European Union in 2012, the industry continued unabated with unisex rates (discussed in more detail later). The fight for financial survival in businesses has often been the cause of unethical business practices. If life insurance can be considered a social good,⁵ then that may contribute to the argument that the survival of the industry is to the general benefit of society. However, the survival argument could never serve as justification for unethical practice.

The actuarial justification for premium discrimination is based on statistical evidence. While statistical justification can be considered a necessary condition for ethical justification, it may not be a sufficient condition. Statistical evidence should not be accepted without qualification, since the answer provided by statistical evidence will often depend on the question investigated. The statistical evidence is also not equally strong for all aspects of the discrimination. Therefore, the ethical justification of the statistical evidence must be considered carefully.

⁴ The CRO Forum is a high-level discussion group of the Chief Risk Officers of major European insurance companies.

⁵ See Section 2.5

The approach of this thesis is firstly to explain, qualify and quantify the varying underwriting factors contributing to the large discrimination in premium rates in detail, and to discuss the economic and actuarial justification of each aspect. Thereafter, the ethical justification of the principle of discrimination in life insurance underwriting is considered. Finally, the ethical justification of each of the separate underwriting factors is brought under scrutiny.

The hypothesis of this study is that the general concept of premium discrimination, as well as many of the specific aspects of the process, can be ethically justified. The ethical framework that was used for this, is the theory of moral contractualism, developed by Harvard philosopher T.M Scanlon as set out in his book, *What We Owe to Each Other*. Scanlon's contractualism determines which acts are right and wrong by defining wrongness in terms of unjustifiability (Scanlon, 1998). For the contractualist, people are "morally motivated by an intrinsic desire to justify themselves to others" (Ashford & Mulgan, 2012:3).

For an actuary intimately involved in life insurance premium determination over many years, the appeal of the contractualist approach lies in considering reasons for and justification of premium discrimination to others, based "on grounds that they ... could not reasonably reject" (Scanlon, 1998:154). Using Scanlon's definition of the nature of moral wrongness, the challenge is to define principles for premium discrimination which no one can reasonably reject – and then to test each aspect of the discrimination process against these principles.

Premium discrimination based on socio-economic differences is more prominent in South Africa with our very heterogenic population, than in many other countries with more homogenic populations. This socio-economic discrimination is also the most difficult aspect to justify ethically. The thesis should serve as a warning to the insurance industry and the actuarial profession that, even if premium discrimination can be ethically defended, the industry will remain vulnerable to a social and political attack on the practice of socio-economic discrimination.

1.5. CHAPTER LAYOUT

In Chapter 2, the unique nature and features of the life insurance industry are described, as background to a better understanding of the underwriting process. It touches on aspects such as solidarity versus mutuality, risk pooling, cross-subsidies, adverse selection and insurance as a social good. The various aspects of underwriting life insurance products are considered. The process of full underwriting is mainly considered in terms of *general underwriting* (whereby each applicant is allocated into a specific standard rate group based on his or her age, sex, smoking status and socio-economic class). The effect of each of the underwriting factors on premium discrimination is quantified. Brief

consideration is given to *individual adjustments* (whereby the additional risk posed by the health status, occupation and part-time activities is considered). The relevant aspects of legislation governing the insurance industry, general legislation against unfair discrimination, and the (largely overseas) debate regarding genetic underwriting, are briefly considered.

In Chapter 3, Scanlon's theory of Moral Contractualism is investigated. The structure and scope of the theory are discussed and some questions, issues and objections regarding the theory are considered. The appeal of Scanlon's contractualism as an alternative to utilitarianism and deontology is described and reasons are given for the choice of this theory as an appropriate theoretical moral framework with which to consider the fairness of the discrimination in life insurance underwriting in South Africa.

In Chapter 4, the justification for discrimination in life insurance underwriting is considered. Contractualist principles, to which no one can reasonably object, are defined for the justification of the lack of discrimination in social insurance, and for the principle of discrimination in private insurance. A principle for fair discrimination is defined, against which the specific underwriting factors can be measured for fairness. Specific attention is given to the discrimination based on socio-economic classes defined in terms of income and education, which is a pertinent feature of the underwriting practice in the heterogeneous population in South Africa.

Chapter 5 provides closing comments and suggests some alternatives.

CHAPTER 2

LIFE INSURANCE CONCEPTS AND UNDERWRITING FACTORS

2.1. THE NATURE OF LIFE INSURANCE

Insurance in general can be described as protection against the negative financial consequences of a detrimental occurrence. Insurance works on the concept of the pooling of individual risk: a large number of participants each make relatively small contributions to enable the pool to pay out a large amount to those few participants who suffer the insured event.

The British House of Commons stated in 1825 that “whenever there is a contingency, the cheapest way of providing against it is by uniting with others, so that each man may subject himself to a small deprivation, in order that no man may be subjected to a great loss” (Brackenridge, 1977:3).

In life insurance, the adverse event is the death of the insured which normally has negative financial consequences, not for the insured person, but for his or her dependants and creditors. Private life insurance is a contractual arrangement provided on a commercial basis whereby an insurance company undertakes to pay a substantial sum of money (the sum assured) upon the death of the insured person, to a designated beneficiary or the deceased estate, in exchange for a regular small premium paid during the term of the contract.

Life insurance is typically purchased to provide for two broad purposes related to the death of the insured, namely (a) to cover the outstanding debt of the insured, as would be a requirement by a bank providing a mortgage loan for the purchase of a house, and (b) to provide financial security to the family members (typically spouse and children) who are dependent on the income of the insured for their livelihood. In the lower income end of the market, the financial support required is often primarily to provide for the expense of a decent funeral.

2.2. UNIQUE FEATURES OF PRIVATE LIFE INSURANCE

Private life insurance has some unique features that differentiates it from other consumer services and which may make it more prone to a perceived need for government intervention.

Most mass consumer products are available to any prospective buyer and the price and conditions of sale are the same for all customers. An insurance company, however, selects the customers to which it is prepared to sell, and sets different terms for distinct groups of customers and for different

individual customers. This is a significantly different approach from the way that other consumer products are sold.

Life insurance is at the same time collective and redistributive in nature. The resources are pooled for all customers, but the benefits are redistributed only to those who are in need and have suffered loss. Customers who survive and do not claim effectively receive only peace of mind and no financial benefit. This makes it fundamentally different from all other consumer services (Moultrie & Thomas, 1997:127).

Like most other types of business, insurers compete on features like price competitiveness, quality of service, discrimination of product and size of distribution networks. These are healthy forms of competition that should contribute to the aggregate welfare of consumers. Insurers, however, can also compete in the area of *risk selection*, by excluding higher risks from its pool of insured lives through different underwriting requirements (as described in Section 2.10). Such exclusions may in some cases be considered as ‘bad competition’ that does not contribute to aggregate welfare of all consumers, with the result that public policy may “be directed towards discouraging this bad competition” (Moultrie & Thomas, 1997:127).

2.3. MUTUALITY VERSUS SOLIDARITY

In South Africa, as in most developed countries, life insurance is generally provided on a commercial basis by private life insurance companies, on what can be described as a basis of *mutuality*. To better understand the concept of mutuality in private insurance, it must be contrasted to the alternative approach to risk pooling, namely *solidarity*, used in most social insurance schemes. David Wilkie (1997:1042) effectively introduced the terms mutuality and solidarity to English actuarial literature and provided a simple exposition of these concepts in the context of the assessment of risks and the sharing of losses.

Mutuality is described by Wilkie (1997:1042) as the normal form of commercial *private insurance*, where participants “contribute to the [risk] pool through a premium that relates to their particular risk at the time of the application” i.e. the higher the risk that they bring to the pool, the higher the premium required. Through effective underwriting “the risk is evaluated by the insurer as thoroughly as possible, based on all the facts that are relevant and available”. From the pooled fund, the life insurer will pay the contracted sum assured to each participant who suffers an insured loss. Participation in mutual insurance schemes is *voluntary* and the amount of cover that the individual purchases is *discretionary* (O’Neill, 2006:569). Thus, individuals who consider themselves as higher risks may be

more inclined to purchase higher cover, while individuals who consider themselves as very low risk may even decline to purchase any insurance.⁶

Discrimination in underwriting, leading to significant differences in premium rates for the same amount of life cover, can be considered an essential feature of mutual insurance.

Solidarity is the basis of most schemes of *national* or *social insurance*. Participation in such state-run schemes is generally *compulsory* for everybody that qualifies, and individuals have *no discretion* over their level of cover. All participants normally have the same level of cover, typically expressed as a fixed monetary amount or a fixed multiple of the participant's salary. Solidarity differs from mutuality in that contributions are not based on the expected risk that each participant brings to the pool (Wilkie, 1997:1042). Contributions are often just equal for all, or it can be according to the individual ability to pay (e.g. as percentage of income). Since everybody pays the same contribution rate, the low-risk participants are effectively subsidising the high-risk participants. To prevent the low-risk participants from opting out, solidarity requires some measure of universality and compulsion.

Solidarity is also the approach used in most company group insurance schemes, where participation is compulsory for all employees, everybody is provided with life insurance equal to some fixed multiple of their annual salary (e.g. three times) and all pay the same premium rate, regardless of their age or health status.

The meanings of the terms *mutuality* and *solidarity*, as defined by Wilkie (1997) and used in this thesis, are not universal. Jyri Liukko describes the term 'solidarity' to mean "the basic principle of risk pooling inherent in both public and private forms of insurance" (2010:458). He states that the concept of solidarity is often used "quite vaguely to describe the collective foundation of insurance without recognizing the actual diversity of ... risk classification principles" (Liukko, 2010:459). He then defines the terms *chance solidarity* (*mutuality* in this thesis) as denoting the nature of private insurance and *subsidizing solidarity* (*solidarity* in this thesis) as denoting the nature of social insurance.

2.4. CROSS-SUBSIDIES

Wilkie (1997:1042) warns that it is "important not to get the concepts of mutuality and solidarity mixed up". Common to both is the sharing of loss, which is effectively a subsidy from those who do not claim to those who suffer the insured event and claim. The major difference between the two

⁶ See Section 2.4 on adverse selection.

approaches is that with solidarity there is a *cross-subsidy* of high-risk participants by low-risk participants, regardless of who claims, since “only mutuality involves the assessment of risk”.

A simple example may help to clarify: consider 100 participants who each buy a lottery ticket for R10 where one winning ticket is randomly drawn from the 100 tickets. The winner who receives R1 000 is effectively ‘subsidised’ by the 99 other participants who receive nothing – but there is no cross-subsidy, for all participants have an equal chance of winning. Consider the situation, however, if the 50 men in the group each still get one ticket for R10 while the 50 women each get three tickets for R10. If one winning ticket is randomly drawn from the 200 tickets now in the pool, each woman has a three times higher probability of winning the lottery than each man. It is still possible that a man could win, but the men as a group are cross-subsidising the women.

With solidarity, such cross-subsidies are an integral part of the process: since all participants pay the same contribution, the low-risk members (the young and the healthy) are paying much more than what is actuarially required to cover their risk. They are effectively subsidising the high-risk members (the old and the sick) who can therefore pay much less than what is actuarially required by their high level of risk. Solidarity can only work as long as participation is compulsory so that the low-risk members cannot opt out. The young members currently providing the cross-subsidy, can hopefully look forward to a future time when they will be the old high-risk members who will then be subsidised. This will only happen, however, if the insurance scheme remains viable. Demographic changes,⁷ such as a decline in birth rates and an aging population, may result in economic problems for such social insurance schemes, leading to increases in contribution rates or reduction in benefit levels for all members.

With mutuality, cross-subsidies are kept to a minimum: each participant should contribute according to the level of risk that he or she brings to the pool, which requires that the underwriting process must be effective. Since participation is voluntary and the amount of cover is at the discretion of the insured life, the most accurate assessment of individual risks is a critical requirement for financial soundness in the commercial insurance market. This is to prevent (unattractive) high-risk applicants joining the pool and selecting high levels of cover at premium rates that are too low for their risk level, or (attractive) low-risk applicants seeking cheaper alternatives elsewhere in the highly competitive insurance market.

⁷ A recent study of the International Monetary Fund projected that “the ratio of retirees to workers in Europe will double by 2050”. Another study predicted the median population age in Europe will increase from 38 years to 52 years old by 2050.

2.5. ADVERSE SELECTION

The terms adverse selection and anti-selection are used to describe situations where there are factors undermining the selection process of the insurer. The terms are often used synonymously to mean what is generally described as adverse selection (see below), but the term anti-selection is sometimes used more narrowly to describe fraudulent non-disclosure.

Nienaber and Reinecke (2009:174) employ the latter meaning when they describe anti-selection as “a situation where insurance is taken out in the confident expectation that the event insured against is about to happen”. An applicant contemplating suicide would be an extreme form of such anti-selection. Non-disclosure or misleading disclosure of relevant medical evidence to hide any form of ill-health constitutes the principal form of anti-selection, according to Brackenridge (1977:22). Such anti-selection is a fraudulent breach of the contractual principle of *uberrima fides* by the applicant.⁸ The risk of suicide is likely to be related to serious depression, which is an example of ill-health that should be disclosed by the applicant.

Adverse selection, on the other hand, is not fraudulent and is to be expected in a competitive market. Liukko (2010:462) describes adverse selection as the “theoretical tendency of low-risk individuals to avoid or drop out of insurance pools (the reverse being true of high-risk individuals) if prices don’t correlate sufficiently with risk”. Adverse selection is also likely to occur when some life insurers that are more lenient in their discrimination than other insurers in terms of any of the underwriting criteria of age, sex, smoking status and socio-economic class.⁹ For example, if one insurer A does not charge smokers higher premium rates than non-smokers while other insurers do discriminate, insurer A will invite adverse selection by attracting more smokers and will be subject to their higher mortality risk. The resulting increased claim incidence will reduce the profitability of company A, which can threaten its long-term financial survival.

2.6. SYMMETRY OF INFORMATION BETWEEN BUYER AND SELLER

O’Neill (2006:569) explains that mutual insurance can only thrive in conditions of information symmetry, where both the insurer and the insured have access to the same information. If a “high-risk individual knows more about her risk than her insurance company, then she can buy insurance at a price that does not reflect the real level of risk that she brings to the pool”, and she may “tend to buy too much insurance too cheaply”. If an insurer experiences significant levels of such adverse

⁸ See Section 2.6.

⁹ See Section 2.9.

selection, it will drive up the liabilities of their insured pool, which will over time force the insurer to increase their premium rates. This will put the insurer at a competitive disadvantage because low-risk individuals are likely to opt out of the insurance pool if they can obtain cheaper insurance elsewhere.

The generally accepted axiom in commerce traditionally has been *caveat emptor* or “let the buyer beware”. This principle is intended to avoid disputes arising from information asymmetry, which is the pervasive situation where the seller (of the second hand car, for example) knows more about the quality of product than the buyer. In life insurance *marketing* the same situation prevails, and the buyer must beware of high pressure sales tactics and unknown product features.

In life insurance *underwriting*, however, the information asymmetry generally favours the buyer, who knows more about his own level of risk than the insurer. The purpose of underwriting is to ensure a better symmetry of information for the seller (the insurer) and the principle of *uberrima fides*, or “utmost good faith”, is an important principle to protect the insurer. Most other “commercial contracts require only a negative duty of non-misrepresentation to be legally binding”, with no general requirement for parties to act in good faith. In the case of insurance contracts, however, parties do have “a positive duty of disclosure” (O’Neill, 2006:571). The most important duty of good faith for applicants is the duty to disclose all material facts of which they are aware, that are relevant to the risk to be insured. Failure to disclose material information can result in a policy being cancelled, or a claim in terms of the policy being refuted, by the insurer.

2.7. LIFE INSURANCE AS A SOCIAL GOOD

The social and economic significance of life insurance is important to consider in an assessment of the ethical boundaries of its commercial availability. If reasonable access to life insurance is considered socially desirable or necessary, then discrimination in underwriting against any specific population group which may limit their access to life insurance, could be open to ethical questioning.

Moultrie and Thomas (1997:128) see insurance against adverse contingencies as an example of a *merit good*, which they describe as “a good that society considers should be available to all, even to those who do not have the resources to purchase it”. Typical examples would be education, vaccination and primary health services. It can be argued that individuals and society should have access to these commodities on the basis of need, rather than ability and willingness to pay.

Sandberg (1995) provides a more useful distinction between three different types of “good” of products. He defines ‘*primary social goods*’ as the essential “goods that everybody needs for leading a life under decent physical conditions” (Sandberg, 1995:1554). These goods can be regarded as

indispensable and civilised societies normally view access to such goods for all citizens as a moral necessity. On the other hand, ‘*commodities*’ are goods that are sold on the open market and where society has no moral obligation to ensure the egalitarian distribution of such goods. Between these types fall ‘*non-primary social goods*’, that do not serve basic human needs, but have a wider social merit than ordinary commodities.

Because of extensive social security systems that exist in many European countries, Sandberg (1995) does not think it is “reasonable to see European life insurance ... as a primary social good”, because the dependents of a deceased in a welfare-type state will be provided with some reasonable minimum economic living standard. He argues that life insurance is “more than just a commodity because it serves valuable social functions” and should therefore be considered a non-primary social good (Sandberg, 1995:1554).

Sandberg (1995) acknowledges that “when welfare systems are less extensive”, life insurance can be considered more as a primary social good. Some basic level of life insurance for everybody (for example to cover the cost of a decent funeral, and to provide some minimum level of financial provision to needy surviving spouses or orphans) could be considered a primary social good. If that is the view of society, then it would be the responsibility of government to provide such a minimum level of cover to the population.

Some goods can generate ‘positive externalities’ and for that reason society has an interest in ensuring that the good is supplied as widely as possible. A positive externality refers to a benefit that accrues to people other than those to whom the service is supplied. Inoculation against contagious disease is a good example – others benefit because they are now protected from catching the disease from the inoculated person. In the case of life insurance, the benefit of the pay-out at death is a positive externality, since it accrues to the beneficiaries of the life insured. This positive social feature of life insurance confirms its status as a non-primary social good. O’Neill (2006:578) defines the further concept of a ‘*gateway social good*’ as a good that has “an importance which is not intrinsic, but which is given by the way it functions as a gateway to [a] broader set of goods”. He considers commercial life insurance as a gateway social good of great significance, since it is a requirement for access to a mortgage needed by potential house buyers, which he sees as “a basic precondition of full economic citizenship”. Macdonald (2003:218) describes life insurance as “a necessity of everyday life” in terms of its importance for house purchase in the United Kingdom (UK), a factor which, according to Sandberg, could tend to qualify it as a primary social good in the UK market (Sandberg, 1995:1554).

2.8. THE TERM ‘UNDERWRITING’

The word “underwriting” is generally used to describe the *action of accepting* a financial responsibility, such as a merchant bank underwriting a share issue (agreeing to buy the shares not bought by investors in an issue of new securities) or an insurance company underwriting the maize crop of farmers (accepting the liability to pay for certain financial losses like drought or hail).

In this thesis, the word ‘underwriting’ is used more narrowly, to describe the *process of assessing* the life insurance risk from the information provided, before the risk is accepted. This risk underwriting process uses information from the application form, medical reports, etc., to determine the most appropriate premium rate to charge the applicant. Nienaber and Reinecke (2009:102) describe underwriting as “the cornerstone of voluntary individual risk cover. It reflects an axiom of life insurance: same rates for same risks. If insurers were to refrain from underwriting and charge the same rates for all risks, it would encourage anti-selection by policyholders”.

Insurance products can broadly be classified into two categories, namely those with *limited underwriting* (where most of the risk factors are ignored), and those that are *fully underwritten* (where all the risk factors are carefully considered in determining the premium rate). In the fully underwritten category one can distinguish between the *general underwriting* process (i.e. the allocation of each insured life into a specific risk groups) and the *individual underwriting* process (i.e. the assessment of any additional individual risk, after the allocation to a specific risk group). The commonly used general underwriting criteria in South Africa are age, sex, smoking status and socio-economic class. The individual underwriting criteria are health status, occupation and leisure pursuits. The effect of each of these factors is broadly quantified and the justification of each is considered.

2.9. FUNERAL INSURANCE WITH LIMITED UNDERWRITING

The main concern of this study is the fairness of the rate discrimination inherent in the underwriting process of fully underwritten individual life insurance products. There are some individual life insurance products, such as funeral insurance, with very *limited discrimination in underwriting*. For a better understanding of underwriting practices in life insurance, funeral insurance is briefly described next, so that the fairness of limited underwriting as opposed to full underwriting can be considered.

In comparison to fully underwritten life insurance, funeral insurance is very expensive. Funeral insurance is a special type of life insurance taken out to provide for the financial responsibility of the cost of a funeral, which would typically include the funeral of the policyholder and close family members. The target market for funeral insurance tends to be the lower income and financially less

sophisticated section of the population (Nienaber & Preiss, 2006), mainly in the black and coloured population groups.

To simplify the marketing process, the underwriting requirements of funeral life insurance are very limited, often with little or no allocation into different risk groups and no individual health assessment. There is normally a waiting period (e.g. 12 months) in which no death claim is allowed, to protect the insurer against adverse selection by terminally ill applicants. The lower income population has substantially higher underlying mortality rates than the higher income population. The higher than average mortality of the target market, coupled with limited underwriting, contributes to the expensive nature of these products.

In addition, there are several other aspects which also cause funeral insurance to be inherently more expensive. Firstly, the amount of cover provided by funeral insurance is very low – the cover is typically between R10 000 and R50 000, which is meant to meet the expected cost of a funeral. Fixed administration cost as a percentage of the relatively small premiums tend to be quite high. Secondly, the cost of selling life insurance is substantial, since insurance is normally sold on commission via a one-on-one consultation process. Funeral insurance tends to have high lapse rates causing a very short expected policy duration, so that the provision to recoup the marketing cost is a substantial part of each premium. Because of the above factors, the cost included in the premiums is typically very high relative to the premium. Nienaber and Preiss (2006) quote the case of a small funeral policy for a sum assured of R5000 with a monthly premium of only R20. Of this premium R12,50 went towards commission and administration, while only R7,50 went towards the actual cost of insurance.

Nienaber and Preiss (2006) state that “the funeral insurance market can be treacherous. Margins are small, premiums are low, operators are many, competition is fierce, and various participants insist on a share of the premium pie. It is not easy to find ready solutions for all the problems”. In addition to being relatively expensive, the ethical issues of funeral insurance include aspects such as ambiguous contract terms, inadequate explanations to policyholders, unilateral increase of premiums or the termination of policies on short notice by insurers (Nienaber & Reinecke, 2009:373-374). These issues exist, despite the fact that funeral insurance is regulated as part of the life insurance industry (as described in Section 2.13).

The ethical issues related to the lack of underwriting are considered in Chapter 4, but these tend to be overshadowed by the other issues as outlined above.

2.10. GENERAL UNDERWRITING FACTORS: THE ALLOCATION INTO STANDARD RISK GROUPS

The purpose of the study was to consider the fairness of underwriting practices in the South African insurance market, particularly in terms of the rating criteria used in products where full underwriting is done. For *fully underwritten life insurance*, Nienaber and Reinecke (2009:104) state that the commonly used underwriting criteria in South Africa are age, sex, smoking status, socio-economic class, health status, occupation and leisure pursuits. In this analysis these factors are separated in two categories, which are called the *general underwriting criteria* (age, sex, smoking status and socio-economic class) and the *individual underwriting adjustments* (health, occupation and leisure pursuits).

The general underwriting criteria affect every single applicant and are used to allocate each person into a specific risk group, in which a *standard premium rate* for that risk group applies. For example, an applicant may be classified as a 45-year-old smoking male in the top socio-economic group, and the corresponding standard premium rate will be determined. According to O'Neill (2006:568), the underwriting criteria used in the UK are age, sex and smoking status. This means that in the UK, with its more homogeneous population in terms of income and education levels, discrimination based on the socio-economic category is not prevalent.

Standard mortality tables, differentiated according to the four general underwriting factors of age, sex, smoking status and socio-economic class, are published and regularly updated by the Actuarial Society of South Africa (ASSA), based on industry-wide insured life statistics. For the first three factors the parameters for categorisation can be determined uniquely and objectively for each person. There is, however, no standard, industry-wide definition of the underwriting factor of socio-economic class. Each life insurance company determines their own income and education levels to define their socio-economic classification, and each company must adjust the standard mortality rates of ASSA, based on their actuarial judgement as to its applicability to their target market.

The effect on the cost of life insurance of each of the four general underwriting criteria is quantified below. In each case, the effect is considered *ceteris paribus*: if age is considered, for instance, then the sex, smoking status and social economic class are kept constant.

(a) Age

Age is the single most important rating factor in life insurance and it was introduced into life insurance underwriting in England as early as 1781 (Brackenridge,1977:5). Mortality rates increase exponentially with age: the expected number of deaths for males insured in South Africa increases

from less than two deaths per 1000 lives at age 20, to three deaths per 1000 lives at age 40, six deaths per 1000 lives at age 50 and 15 deaths per 1000 lives at age 60 (Nienaber & Reinecke, 2009:104). For many years, up to the 1960s, age was the only underwriting factor used in the insurance industry in South Africa.¹⁰

As a result, as shown in Table 2.1, for fully underwritten life insurance, the amount of cover available for a premium of R100 per month varies with age at inception (based on a non-smoker male in the top socio-economic rate group).

Table 2.1: Comparison of cover by age

Age at entry	20	40	60
Sum insured	R650 000	R400 000	R100 000

The age discrimination in the cost of life insurance is the most prominent of all the rating factors. Compared to the 60-year-old, for the same premium the 40-year-old gets four times as much cover and the 20-year-old gets about six-and-a-half times as much cover. If all ages were to pay the same premium rates, the cross-subsidies of the old members by the young members would be so large that very few young members would be prepared to participate on a voluntary basis.

Although the discrimination between a 20-year-old and a 60-year-old is considerable, the age-to age discrimination is gradual. Typically, rates are provided for seventy different ages (from age 15 to age 85) and the increase from age to age is on average less than 5% per year.

(b) Sex

The effect of sex as a rating factor in premium discrimination is not nearly as prominent as age discrimination. At any given age the expected mortality rate for males insured is roughly double that of females, e.g. about six deaths per 1000 lives at age 50 for males, compared to three deaths per 1 000 lives for females at the same age (Nienaber & Reinecke, 2009:104). As a result, the amount of cover provided to a female, *ceteris paribus*, is correspondingly considerably more than for a male – i.e. it is a positive discrimination in favour of females. The positive discrimination in favour of females (initially only white females) was first introduced in the 1960s, by using male premium rates with a three-year age deduction (roughly the same as a 15% premium discount). By 1980, the age

¹⁰ The history of the introduction of the different underwriting factors in the insurance industry in South Africa is based on information obtained from old rate books in the archives of Sanlam Life, a leading South African insurance company.

deduction was five years (about a 25% premium discount), and by 2000 it was seven years (about a 35% premium discount).

Currently most insurers use separate premium rates for females. For a premium of R100 per month, the amount of cover available for a female applicant compares as follows to that of her male counterpart (based on non-smokers in the top socio-economic rate group):

Table 2.2: Comparison of cover by sex

Age at entry	20	40	60
Sum insured: Male	R650 000	R400 000	R100 000
Sum insured: Female	R1 000 000	R600 000	R150 000

This table shows that for the same premium and the same age females get about 50% more cover than males. Unlike the graded age discrimination over 70 different ages, the sex discrimination is binary – either male or female. The sex discrimination discount is roughly equal to an average age deduction of ten years relative to males. While the sex discrimination is significant, it is less significant than the age discrimination from the young end of the age spectrum to the old.

(c) Smoking status

The detrimental effect of smoking on health is well known, and the mortality risk of a smoker is roughly double that of a non-smoker. At higher ages this increased mortality can be directly attributed to smoking-related diseases such as cancer (particularly lung cancer) and ischaemic heart disease. Yet the same higher mortality rate for smokers relative to non-smokers applies at the younger ages, long before the increased health-related risk becomes significant. At young ages, most deaths are due to non-natural (violent) causes such as motor car accidents, which is strongly related to alcohol abuse. Because heavy drinkers are often also smokers, the smoking habit is an indication of a generally more hazardous lifestyle, and for this reason the expected mortality of smokers at young ages is roughly double that of non-smokers (Nienaber & Reinecke, 2009:104). In South African, the formal discrimination¹¹ in premium rates between smokers and non-smokers was introduced in the early 1990s with a fairly modest distinction of about 20% more cover for non-smokers than smokers. For a premium of R100 per month, the amount of cover available for male smokers, *ceteris paribus*, currently compares as follows with that of non-smokers (based on the top socio-economic rate group):

¹¹ In the early 1980s, non-smoking was one of the criteria, in addition to education and income levels, that qualified an applicant for 'preferential rates', as described in Section 2.10(c).

Table 2.3: Comparison of cover by smoking status

Age at entry	20	40	60
Sum insured: non-smoker	R650 000	R400 000	R100 000
Sum insured: smoker	R350 000	R200 000	R40 000

Table 2.3 shows that for the same premium, at all ages, non-smokers get about 100% more cover (twice as much) than smokers. Similar to the distinction based on sex, the premium discrimination based on smoking is also binary (either smoking or non-smoking) but the effect of smoking is about twice as significant as the sex discrimination.

It should also be noted that the smoking classification is not very sophisticated: It is based only on the smoking status at the inception of a life insurance policy, with no regard for the applicant's history of smoking. Furthermore, the classification on an existing policy is not subsequently revised if a non-smoker should start smoking, but a smoker who stops smoking can apply to have his premium reduced accordingly.

(d) Socio-economic class

Socio-economic rating is effectively based on levels of income and education. The expected mortality of an uneducated manual labourer is as much as four times that of a graduated office worker of the same age. Many factors may contribute to this, such as the quality of nutrition, living conditions, medical care, working environment, etc. The life insurance industry in South Africa has developed a sophisticated system of socio-economic underwriting, to cope with the very heterogeneous composition of the population. Insurers typically have four to five rate groups, based on a combination of education and income levels (Nienaber & Reinecke, 2009:104).

The first basic form of socio-economic rating was introduced in the early 1980s. Preferential rates were offered to applicants who were professionally qualified, or had a four-year tertiary education, or had a three-year tertiary education plus an income R2 300 pm, or who were non-smokers. Preferential rates provided about 25% more cover for the same premium than normal rates.

In time, the socio-economic discrimination became more sophisticated and more significant. By the 1990s, a three-tier distinction between normal rates, preferential rates and super rates was typical, with super rates providing about 40% more cover than normal rates.

A typical¹² current socio-economic classification, which allocates applicants into four rate groups, is shown below. The lowest risks (lowest premium rates) are in Class 4 and the highest risks (most expensive premium rates) in Class 1. The education and income criteria (considerably simplified) are listed in Table 2.4.

Table 2.4: Socio-economic classification by education and income

Class 4	Four-year degree or matric and R30 000 p.m. income
Class 3	Three-year degree or matric and R16 000 p.m. income
Class 2	Matric or no matric and R16 000 p.m. income
Class 1	No matric and any income level

Table 2.5 lists the amount of cover available for a premium of R100 per month, which varies according to socio-economic category (for male non-smokers).

Table 2.5: Comparison of cover by socio-economic class

Age at entry	20	40	60
Sum assured: Class 4	R650 000	R400 000	R100 000
Sum assured: Class 3	R400 000	R300 000	R70 000
Sum assured: Class 2	R250 000	R200 000	R50 000
Sum assured: Class 1	R150 000	R100 000	R30 000

The table shows that, relative to the person in Class 1 (the lowest socio-economic level), Class 2 provides about 100% more cover, Class 3 provides about 200% more cover and Class 4 (the top socio-economic level), provides about 300% more cover for the same premium (when the other rating factors are kept constant).

The information also shows that the extent of the premium discrimination based on sex, socio-economic class and smoking, were initially quite modest, when started in the 1960s, 1980s and 1990s respectively. Over time, the nature of the discrimination became more sophisticated and the difference in premiums became more significant.

¹² The classification is a simplification of that used by Sanlam Life, a leading South African insurance company.

In summary

There is a marked difference in the significance of the four general underwriting criteria. The extent of the discrimination in premium rates is least significant for the binary distinction in sex, with females getting 50% more cover than males. The binary discrimination based on smoking status has a larger effect, with non-smokers getting about 100% more cover than smokers. The four-step discrimination of socio-economic class is significantly more pronounced, with the top socio-economic class, *ceteris paribus*, getting about 300% more cover than the lowest class. Finally, the year-by-year distinction between different ages has the largest effect over big age differences, with (for example) a 20-year-old getting 500% more cover than a 60-year-old.

If the effect of all four underwriting criteria are combined, the discrimination between a very low-risk applicant and a very high-risk applicant is extreme. A 20-year-old non-smoking female in socio-economic class 4, will get almost 50 times as much cover for the same premium as a 60-year-old smoking male in socio-economic class 1 – both determined at the standard rate for their specific risk group.

2.11. INDIVIDUAL UNDERWRITING ADJUSTMENTS

Most applicants are accepted at the standard rate for each category, based on the four general underwriting criteria (age, sex, smoking status and socio-economic class). Brackenridge (1977:18) states that “one of the objects of life underwriting should be to accept as large a proportion of cases at ordinary rates... leaving only a small percentage of substandard lives to be rated according to the risk of the particular impairment present”. More than “90% of applicants are accepted at standard rates” in South Africa (Nienaber & Reinecke, 2009:104).

The individual underwriting adjustments listed by Nienaber and Reinecke (2009:104) are health, occupation and part-time activities. While the four general underwriting criteria affect everybody (since they are used to allocate each applicant into a standard risk category), the individual adjustments affect few applicants. An applicant that is exposed to an additional individual risk, would normally get a premium loading on top of the standard premium rate.

Health status

To determine the state of health of an applicant, a medical questionnaire must be completed and a full medical examination by a medical practitioner may be required in the case of large sums insured. Important risk factors are body weight, blood pressure, cholesterol levels, evidence of any medical condition (like heart problems, diabetes, being HIV positive) and family history of specific diseases.

Based on the medical evidence, about 90% of the applicants are accepted at standard rates, about 7% are accepted as substandard risks and about 3% are declined or postponed (Brackenridge, 1977:19).

The loading of the premium for adverse medical conditions is typically from 100% to 250% of the normal premium rate for that applicant. A loading of 100% would mean whatever discrimination in premium rates implied by the general underwriting criteria, will be duplicated in the loading – since the whole premium is doubled, the discrimination is effectively also doubled.

Occupation and part-time activities

Examples of dangerous occupations and part-time activities would include underground mining, working with explosives, professional boxing, special military forces, private aviation, parachuting, and motor car racing.

The presence of additional individual risk factors may result in a loading of the standard premium, or exclusion of cover for certain causes of death. The statistical evidence for quantifying the different risks is scarce and there is much less certainty of the actuarial ‘correctness’ of the loadings charged by life insurers for these high-risk activities. Due to the limited number of people affected, this form of rate discrimination was not considered for this study.

2.12. THE USE OF GENETIC INFORMATION IN UNDERWRITING

The topic of the potential use of predictive genetic information in life insurance underwriting has caused considerable debate overseas in recent years but did not get much attention in South Africa. Ethical objections against possible genetic discrimination in underwriting has led to public pressure on the regulators in many countries to address the issue in the insurance industry. Liukko (2010:458) points out that genetic information seems to have a special moral status in the recent debate, while insurers have legitimately been allowed to differentiate between applicants according to risk factors such as age, sex and health. The use of genetic test results is deemed to be unfair discrimination, while any other kind of health information is considered as fair. It is even acceptable to request information about family health history, which can indicate a genetic disposition to certain medical disorders such as heart disease, high blood pressure, stroke, some cancers and diabetes. The vociferous support for the view that genetic information is unique and needs special protection, has led to the introduction of genetic non-discrimination legislation for life and health insurance in many European countries and in the United States (Liukko, 2010:458).

The potential problem of genetic testing has been highly exaggerated in much of the academic debate on the matter. O’Neill (2006) has even proposed the radical solution of abandoning the free-market

approach of mutual life insurance, in favour of a compulsory centralised solidaristic mechanism. He views this as “ethically unavoidable if we are to pursue a concern for social justice into the coming world of ... rising genetic information.” (O’Neill, 2006:587). Such extreme views largely ignore the impracticality and the improbability of the introduction of rate discrimination by the life insurance industry based on genetic information.¹³ Reynolds (2013:37) points out that implementing genetic testing is unlikely to provide a significant and sustainable competitive advantage to insurers. Furthermore, the direct cost of implementing genetic testing into underwriting “can only be justified by a significant risk of adverse selection” from people with information about their own high-risk genetic makeup. No significant empirical evidence of such adverse selection has been found (Reynolds, 2013:25).

The issue of genetic underwriting in life insurance has resulted in a significant debate on the fairness of risk classification in life insurance in many overseas countries, but in South Africa the matter has attracted little attention. As Reynolds (2013:37) points out, the “failure of the [South African] regulator to sufficiently address the problem of insurance for HIV infected individuals, raises doubt as to whether any laws against genetic discrimination in underwriting will be even considered in the near future”.

2.13. LEGISLATION GOVERNING THE INSURANCE INDUSTRY

The life insurance industry in South Africa is governed by the *Long-Term Insurance Act, 1998* (LTI Act) (RSA, 1998). The industry is regulated by the Prudential Authority (PA) of the South African Reserve Bank and it is supervised by the Financial Sector Conduct Authority (FSCA).¹⁴

Paragraph 46 of the LTI Act stipulates that the statutory actuary of the insurer must be satisfied that for any kind of policy the insurer issues, “the premiums, benefits and other values thereof are actuarially sound”. More importantly for the theme of this thesis, the insurer may not “make a distinction between the premiums, benefits or other values unless the statutory actuary is satisfied that the distinction is actuarially justified”. The terms *actuarially sound* and *actuarially justified* would mean that the actuary has sufficient statistical evidence that the premium rates charged for the product should be financially sound – i.e. adequate to cover the risks and costs, with allowance for a reasonable profit margin.

¹³ See Section 4.9 for a brief consideration of how (hypothetical) genetic underwriting would measure up against the criteria of the Fair Discrimination Principle (as defined in Section 4.7).

¹⁴ Until 1 April 2018 both the regulatory and supervisory functions were done by the Financial Services Board (FSB).

If there is a significant difference in the mortality risk of applicants, so that a distinction in premiums can be actuarially justified, the requirement of financial soundness dictates that a corresponding distinction be made in the premiums charged, as the following simple example would explain: It would be possible for insurer A to calculate a financially sound *average* premium (i.e. with no discrimination) for a given mixture of high risk and low risk applicants – say smokers and non-smokers. If, however, the composition of the group would change to include more smokers and less non-smokers, then that average premium will no longer be financially sound. It is very likely in a competitive free market that another insurer B would see the marketing opportunity to offer differentiated premiums, by charging less for the non-smokers and more for the smokers. Assuming the public is rational and well informed, non-smokers would choose the lower premiums offered by insurer B. The smokers would still choose the average premiums offered by insurer A, but A will then find that the average premium would no longer be sufficient – i.e. not financially sound. The financial soundness requirements of the LTI Act seems to support, or even *require*, the principle of premium discrimination.

The *Financial Advisory and Intermediary Services Act* (FAIS Act) regulates the activities of all financial service providers (including insurers) who give advice or provide intermediary services to consumers of financial products (including life insurance). The General Code of Conduct in Section 16(1) of the FAIS Act requires that clients must “be able to make informed decisions and that their financial needs ... will be appropriately and suitably satisfied”.

Treating Customers Fairly (TFC) is a supervisory framework of the FSCA, designed to ensure specific fairness outcomes for financial services consumers.¹⁵ Financial institutions, including insurers, must “demonstrate that they deliver [six] specified [TCF] outcomes to their customers across the product value chain”. The three TCF outcomes most relevant to the topic of this thesis require that “products sold are designed to meet the needs of identified customer groups and are targeted accordingly”, that “customers are provided with clear information and are kept appropriately informed”, and that any advice given “is suitable and takes account of customer circumstances”.

There are no requirements in the FAIS Act or the TFC framework that can be interpreted to cast any prohibition on the issue of premium discrimination in life insurance. These documents were drafted with the full knowledge of the established practice of such discrimination in the industry, which may be interpreted as an implicit approval of the practice. The FAIS and TCF requirements for products and advice that are appropriate and suitable to customer circumstances, can be positively interpreted

¹⁵ *Treating Customers Fairly in the financial Sector* – Discussion Document December 2014, available at www.treasury.gov.za/public_comments/FSR2014.

that life insurance customers should be provided with products where the premiums are appropriately differentiated according to the particular risk of the different applicants.

2.14. LEGISLATION AGAINST UNFAIR DISCRIMINATION

The stated purpose of the *Promotion of Equality and Prevention of Unfair Discrimination Act 2000*¹⁶ is to eradicate “social and economic inequalities, especially those that are systemic in nature, which were generated in our history” (RSA, 2000).

The Act defines prohibited grounds for discrimination as “race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth”. The Act also refers to the overwhelming evidence of the impact of discrimination on the grounds of socio-economic class (amongst other factors) for which special consideration is required.

Any person may institute proceedings under the Act on behalf of themselves, other persons or in the public interest. In the case of a complaint of prima facie discrimination based on one of the prohibited grounds, it is the responsibility of the respondent to prove that the discrimination is fair. This will be the case if “the discrimination reasonably and justifiably differentiates between persons according to objectively determinable criteria intrinsic to the activity concerned”. Other factors to be considered will be “the nature and extent of the discrimination, the likely impact of the discrimination on the complainant” and whether the complainant belongs to a disadvantaged group. It will also be considered “whether the discrimination has a legitimate purpose”, to what extent this purpose is achieved and “whether there are ... less disadvantageous means to achieve the purpose”.

A schedule to the Act provides a list of unfair practices in certain sectors. For the insurance services the list includes “unfairly refusing on one ... of the prohibited grounds ... to make available an insurance policy to any person” and “the unfair discrimination in the provision of benefits, facilities and services related to insurance”. The list specifically refers to unfairly disadvantaging a person or refusing to grant insurance solely based on human immunodeficiency virus infection / acquired immune deficiency syndrome (HIV / AIDS) status. For the provision of goods and services in general, the list includes “imposing terms and conditions that perpetuate the consequences of past unfair discrimination regarding access to financial resources”.

¹⁶ <http://www.justice.gov.za/legislation/acts/2000-004.pdf>.

It is notable that the insurance industry is one of the very few industries that is directly mentioned in the illustrative list of unfair practices. The general underwriting criteria in the insurance industry of age and sex are directly included in the definition of prohibited grounds for unfair discrimination, and socio-economic class and HIV / AIDS status are specifically mentioned in the Act.

Liukko (2010:462) refers to a 2008 directive of the European Commission on “implementing the principle of equal treatment ... [and] combatting discrimination on grounds of age, disability, religion and sexual orientation”. However, the document allowed “proportionate differences in treatment where ... the use of age or disability is a key factor in the assessment of risk based on relevant and accurate actuarial or statistical data”. In the South African law, there is no such specific concession for the life insurance industry from any of the prohibited grounds of discrimination. If challenged in this regard, the industry will have to be able to prove that any existing discrimination in underwriting is justifiable and fair.

2.15. CONCLUSION

This chapter is intended to qualify and quantify the nature and the extent of premium discrimination in the life insurance industry, particularly in South Africa. The commercial life insurance market is based on the principle of mutuality, with voluntary participation and cover amounts at the discretion of the individual. In commercial insurance, premium discrimination is regarded as essential for financial soundness and it is an established practice worldwide. As the result of competitive pressure and with the availability of more and better statistical and medical evidence, the nature of the underwriting criteria and the extent of the discrimination have been continually expanded.

The actuarial justification for premium discrimination is based on statistical evidence, but this evidence is not equally strong for all aspects of the discrimination. Furthermore, statistical justification alone cannot be considered as a sufficient condition for ethical justification. The hypothesis of this study is that the general concept of premium discrimination, as well as most of the specific aspects of the process, can be ethically justified. The most contentious aspect of premium discrimination in South Africa discussed in this thesis, is that based on socio-economic differences.

The ethical framework of moral contractualism was used for this study as a lens through which to view the ethical justification of the current practice of life insurance underwriting practices in South Africa. The influential version of contractualism advanced by Harvard philosopher T.M. Scanlon in his book, *What We Owe to Each Other*, was used, and it is referred to as ‘Scanlon’s contractualism’ if the context requires, but mostly just as ‘contractualism’ (Scanlon, 1998).

CHAPTER 3

MORAL CONTRACTUALISM

3.1. BACKGROUND

Moral contractualism is the view that morality, our judgement about whether an action is right or wrong, can be understood in terms of an actual or hypothetical agreement or contract between those in the moral domain.

There are two main versions of moral contractualism. The more prominent version has its roots in Rousseau and is based on the concept of a morally constrained agreement among persons who regard themselves as free and equal, entitled to moral respect. Ashford and Mulgan (cited in Zalta, 2012:2) describe contractualism as morality based on binding agreements between people “from a point of view which respects [their] equal moral importance as rational autonomous agents”. Kantian ethics has been the main representative of contractualism for almost two centuries. It is grounded on the two primary values of the rational person as an independent being, and the equal dignity of rational people as ends in themselves. Kantian ethics is normally classified as deontological, but to the extent that duties are derived in a contractual way, it is also a form of contractualist theory.

The less prominent version of moral contractualism has its roots in Hobbes and is also called “contractarianism”. Contractarianism is based on the idea of mutual self-interest, where agents engage in mutually advantageous behaviour for the sake of individual gain. David Gauthier is one of the most influential modern-day contractarianists, who maintains that morality can be derived from the rationality of self-interest.

‘Political contractualism’ (as opposed to ‘moral contractualism’), accounts for social and political justice institutions in terms of social contracts theories. The most influential social contract theorist in the Kantian tradition in the twentieth century is the political contractualist John Rawls. In his seminal book, *A Theory of Justice* (Rawls, 1971), he develops principles of social justice to govern a modern social order. He explains the significance of political and personal liberties, equal opportunity and cooperative arrangements in a society consisting of free and equal persons.

Over the last 20 years, moral contractualism has become an influential position within normative ethics. Its development can largely be attributed to the significant work of Thomas Scanlon (1982). Scanlon introduced his ‘Kantian’ model of contractualism in an article *Contractualism and Utilitarianism* (Scanlon, 1982). In this article, he sets out to present contractualism as a more

acceptable alternative to utilitarianism, which he views as “widely at variance with moral convictions” (Scanlon, 1982:103). The article describes his contractualist theory only in outline but sketches its appeal both as a philosophical theory of morality and as an account of moral motivation. Scanlon (1982) views the source of moral motivation as “the desire to be able to justify one’s action to others on grounds that they could not reasonably reject” (Scanlon, 1982:116). According to Matravers (2002:1), Scanlon wants to “emphasise the contractualist account of motivation as superior to ... [that offered] by utilitarianism”.

In his book, *What We Owe To Each Other*, Scanlon (1998) develops the concept introduced in his 1982 article into a comprehensive contractualist moral theory. Brad Hooker (2002:54), professor in moral philosophy at the University of Reading, rates the hugely ambitious book as “one of the most important books on moral philosophy written in the twentieth century”. Matravers (2002:1), Head of the York School of Law, describes Scanlon’s theory as “the most sustained and comprehensive defence of contractualism since John Rawls’s *A Theory of Justice*”. He considers Scanlon’s contractualism to be rivalling other theories such as utilitarianism and deontology. Wallace (2002:429), professor of philosophy at the University of California, praises Scanlon’s book as “magisterial” and he expects it “will have a decisive influence on the shape and direction of moral philosophy in the years to come” – despite his reservation on various points of detail.

In the next sections, the structure of Scanlon’s theory of contractualism is firstly discussed, emphasising the way the theory is built around Scanlon’s account of moral wrongness and the notion of justifiability to others. This is followed by a consideration of some critical issues concerning contractualism, in comparison to its main rival, utilitarianism, where appropriate. These issues include the limited scope of the theory (in terms of *what we owe to each other*), the problem of aggregation, the objection of circularity, the issue of demandingness and the question of pluralism. The effect of each of these issues on the appropriateness of contractualism as moral lens for this study is considered. The section concludes with a brief discussion of the appeal of contractualism relative to other normative ethics theories, and an outline of a theoretical attempt to find convergence between contractualism, utilitarianism and deontology.

3.2. THE SUBJECT MATTER AND MOTIVATION OF MORALITY

In his 1982 article, Scanlon presents his theory of contractualism as an attractive alternative to the influential theory of utilitarianism. Scanlon believes that contractualism provides a superior account of the **subject matter of morality**, relative to utilitarianism. Scanlon (1982) argues that “the implications of act utilitarianism are widely at variance with firmly held moral convictions” (Scanlon,

1982:103). He believes that his version of contractualism provides “an account of moral belief, moral arguments and moral motivation that is compatible with our general beliefs about the world” (Scanlon, 1982:109).

Scanlon (1982) attributes the widespread influence of utilitarianism to its clear basis of moral reasoning, namely that morality is fundamentally about *individual well-being* (Scanlon, 1982:108). For utilitarianism, whether an act is morally right or wrong is determined by its positive or negative consequence on the well-being in the world, whether directly as in act utilitarianism, or indirectly as in rule utilitarianism¹⁷ (Darwall, 2006:203). For contractualism, the fundamental subject matter of morality is *the nature of moral wrongness*: “an act is wrong if ... it could not be justified to others on grounds that they could reasonably reject” (Scanlon, 1998:4). In his 1982 article, Scanlon provides his initial “contractualist account of the nature of moral wrongness”, namely “An act is wrong if its performance under the circumstances would be disallowed by any system of rules for the general regulation of behaviour which no one could reasonably reject as a basis for informed, unforced general agreement” (Scanlon, 1982:110).

Darwall (2006: 203) contrasts the difference between contractualism and utilitarianism in the **moral motivation** for not doing moral wrong. For contractualists, the source of moral motivation is "the desire to be able to justify oneself to others on grounds they could not reasonably reject". For utilitarianists, “the fundamental moral motive is universal benevolence, a desire for greatest overall well-being”. Scanlon questions the moral motivational value of utilitarianism, since the “tendency to be moved by change in aggregate well-being” implies that we should be moved similarly by “an aggregate gain ... obtained by relieving the acute suffering of a few people ... or by bringing tiny benefits to a vast number” (Scanlon, 1982:116). He argues that the contractualist “desire to be able to justify oneself to others on grounds that they cannot reasonably reject” is “an extremely plausible account of moral motivation” (Scanlon, 1982:116).

3.3. THE STRUCTURE OF SCANLON’S CONTRACTUALISM

Scanlon introduces his treatise by stating that his concern is not about the metaphysical reality of moral facts (Scanlon, 1998:2). According to Matravers (2002:1), Scanlon believes that the issue of “resolving questions of moral wrongness and moral motivation” is not a metaphysical one. Scanlon (1998) sees judgements about right and wrong as a practical issue, since such judgements “make

¹⁷ Act utilitarianism applies the utility principle to evaluate individual actions – the right action is the one that will produce the most overall well-being. Rule utilitarianism applies the utility principle to the evaluation of moral rules, to determine a set of rules that will produce the most overall well-being. The right action is the one that obeys these moral rules. <http://www.iep.utm.edu/util-a-r/>.

claims about what we have reason to do” and “any account of the reason-giving force of such judgements” does not require “an account of the metaphysical status of the subject matter” (Scanlon, 1998:2,3). Scanlon (1998) considers some metaphysical doubts about the concept of reasons and he offers positive arguments for his view that reasons are objective in nature (Scanlon, 1998:56-64).

An account of moral wrongness

At the core of Scanlon’s moral theory is his definition of **moral wrongness**, based on the concepts of **reasons** and **justifiability**. He views “judgements of right and wrong to be claims about ... the adequacy of reasons for accepting or rejecting principles” (Scanlon, 1998:3) and states that such principles “should be justifiable to others on grounds that they cannot reasonably reject” (Scanlon, 1998:5).

Scanlon (1982) modestly calls his initial contractualist formulation of the nature of moral wrongness “only an approximation, which may need to be modified considerably” (Scanlon, 1982:111). He subsequently sets out “to clarify [the] central notions and to work out [the] normative implications” of his version of contractualism (Scanlon, 1982:128), which culminates in *What We Owe to Each Other* (Scanlon, 1998). In the book Scanlon provides the crux of his theory, in his formulation of the **nature of moral wrongness** (which contains only one minor modification from the initial 1982 ‘approximation’):

An act is wrong if its performance under the circumstances would be disallowed by any set of principles for the general regulation of behaviour which no one could reasonably reject as a basis for informed, unforced general agreement (Scanlon, 1998:153).

Richard Miller (2002:194), professor in Ethics and Public Life at Cornell University, calls this formulation “the most famous sentence in late twentieth-century Anglophone moral philosophy”. In a condensed version of the formulation, Scanlon later captures its essence as follows:

An act is wrong if it would be disallowed by any principle that no one could reasonably reject (Scanlon, 2011:116).

Scanlon (1982) explains the function of the components included in the complete formulation: “the idea of ‘informed agreement’ is meant to exclude agreement based on... false belief, ... even ones which would be reasonable for the person ... to have”, while the idea of *unforced* agreement should exclude coercion and provide protection against acceptance of a principle based on weak bargaining position. The qualification of ‘reasonable’ is explained by the example that “it would be unreasonable ... to reject a principle because it imposes a burden on you, when every other alternative principle

would impose much greater burdens on others”. The qualification that the wrongness of an act depends on its performance “under the circumstances”, allows for principles dependent on established convention and “introduces a degree of cultural relativity into contractualist morality” (Scanlon, 1982:111).

Scanlon (1982) also tries to explain why wrongness is formulated in terms of “principles ‘which no one can reasonably reject’, rather than principles ‘which everyone could reasonably accept’”, by using the example of a principle that causes severe hardship to some people. If these people happened to be very self-sacrificing and willing to carry the burden for the sake of the greater good, then it may be reasonable for them to accept the principle. It may, however, not be unreasonable for somebody to reject the principle imposing the burden (Scanlon, 1982:111). This argument of Scanlon is, however, flawed and the two formulations are in fact logically equivalent: If *some* (self-sacrificing) people could reasonably accept the principle, that has no bearing on whether *everybody* could reasonably accept it or, which is logically equivalent, whether no one could reasonably reject it.¹⁸

For a better understanding of Scanlon’s (1982) contractualism, it is necessary to consider in some detail the various notions involved in his theory, namely justifiability, reasons, reasonableness and principles. An understanding of the relationships between these notions is important in the explanation of the concept of the reasonable rejection, which is used to define the moral wrongness of an act.

Justifiability

The notion of **justifiability to others** is central to Scanlon’s theory of contractualism (Southwood, 2009:926). For Scanlon, the most important reason for not doing an action that is wrong, is that such an action could not be reasonably justified to others: “Thinking about right and wrong is, at the most basic level, thinking about what could be justified to others on grounds that they, if appropriately motivated, could not reasonably reject” (Scanlon, 1998:5). It is this motivational basis of agreement that distinguishes Scanlon’s contractualism from other theories involving the idea of a contract. For Scanlon, the parties are not just looking for some mutual advantage but are “moved by the aim of finding principles that others similarly motivated, could not reasonably reject” (Scanlon, 1998:5). Wallace (2002:450) argues that this “idea of justifiability to others on grounds that they could not

¹⁸ Scanlon (1998:390) later admits that the two formulations are in fact equivalent but feels that the “could not reasonably reject” formulation expresses the basic contractualist idea more directly. He views the unanimous acceptance to be a consequence of this condition, rather than the basic idea.

reasonably reject”, imparts “the unity of a single normative domain” to the “plurality of moral considerations”.

Reasons (versus desires)

Scanlon’s theory of **reasons** is foundational to his theory of contractualism. Scanlon takes “the idea of a reason to be primitive” (Scanlon, 1998:17), by which he means that the concept of a reason does not stand in need of explanation in terms any more basic notion.

In his initial article, Scanlon argues that “the source of moral motivation is ... the *desire* to be able to justify one’s actions to others on grounds that they could not reasonably reject” (Scanlon, 1982:116). He now states that a deeper examination led him to conclude that his “initial assumptions about reasons and desires got things almost exactly backward” (Scanlon, 1998:7). He believes that “the notion of a desire needs to be understood as taking something for *a reason*” (Scanlon, 1998:8). He states that desire should not be taken as a special source of motivation and that desires do not “play ... [any] role in the justification [of our actions] ... which are independent of our practical reasoning” (Scanlon, 1998:49). Desires are not the source of reasons, according to Scanlon, but they have “the role of directing an agent’s attention towards reasons that she already has for performing certain actions” (Matravers, 2002:2).

Marshall (2002:17-20) agrees with Scanlon that in the case of a belief, reasons alone can be motivationally sufficient grounds and that there is no need to appeal to desire (‘wanting to believe’) as a further motivating force. She agrees with the argument that “it is our reasons for finding the objects of our desires desirable, that motivate us to act” (Marshall, 2002:22). Although she raises some doubts about the validity of Scanlon’s arguments, Marshall (2002) states that his conclusions “remove a large degree of subjectivity from practical reasoning”, by confirming that “rational agents will recognise reasons, and that these reasons justify their attitudes and actions, while also motivating those actions” (Marshall, 2002:25).

Scanlon’s concern is only with *normative* reasons and then only with those that can be considered as a *good* reason, that really counts in favour of the issue in question (Scanlon, 1998:19). Reasons that explain empirical phenomena, such as why the volcano erupted, have no normative force (Marshall, 2002:14). Normative reasons are those reasons that provide justification for the beliefs and attitudes of rational agents, which include intentions, hopes, fears, and attitudes such as admiration, respect, contempt, and indignation. Scanlon’s term for these types of attitudes is “judgement-sensitive attitudes”, and he defines them as “attitudes that an ideally rational person would come to have whenever that person judged there to be sufficient reason for them” (Scanlon, 1998:20).

Scanlon describes *intentional* actions as the expression of judgement-sensitive attitudes. He states that “a reason for doing something is almost always a reason for doing it intentionally” (Scanlon, 1998:21) and there is little distinction between “reason for action” and “reason for intending”. Therefore, normative reasons can sensibly be required for our intentional actions. We can be held responsible for our attitudes, even if they are not the direct result of a decision, because these attitudes are ‘up to us’. Attitudes are dependent on our judgement that appropriate reasons exist to hold these attitudes and we can be asked to defend them. We are therefore “responsible not only for ... [our] actions, but also for intentions, beliefs and other attitudes” (Scanlon, 1998:22).

Matravers (2002:3) summarises the contractualist relationship between “belief, desire and motivation” as follows: “desire frequently directs our attention to reasons we have for holding certain attitudes and performing certain actions. Consideration of these reasons leads us to judgements as to the strength of these reasons. A reason judgement can be true or false, and by its nature as a judgement about reasons, can motivate agents to perform certain actions”.

Reasonableness (versus rationality)

Scanlon (1998) takes pains to explain why the motivational claim of his theory appeals to the notion of **reasonableness** rather than *rationality*. Other prominent ethical philosophers use the principle of rationality, such as Kant, who defines an action as morally right “if allowed by a principle that one could rationally will to hold as ‘a universal law’” (Scanlon, 1998:190). Rawls also initially maintains that “the principles of justice are those that would be rational for all parties to accept if choosing from behind ‘a veil of ignorance’” (Scanlon, 1998:190) but he later revised his position (see below).

Scanlon’s view on rationality is expressed in terms of reasons and judgement-sensitive attitudes. A rational being will normally arrive at judgement sensitive attitudes via a careful consideration of reasons. However, knowledge of the *most rational thing* to do or think in a situation will always be an abstract ideal, since “we can never know if we have full information or ... all the relevant reasons” (Marshall, 2002:15-16).

For Scanlon, the ordinary meaning of “the most rational thing to do” is “what most conduces to the fulfilment of one’s aims”. What is rational to do to reach one’s aims in a situation, will depend on what others can be expected to do. It may thus be totally rational to accept an extremely unreasonable offer made by an opponent because he is in a position of superior strength – but such a decision carries little moral weight (Scanlon, 1998:193). Of greater use is the notion of *reasonableness* in relation to the information available. It would, for instance, be reasonable for “a layman to believe the results of a flawed scientific study, if she is unaware that it is flawed” (Marshall, 2002:16).

Scanlon (1998) regards the established meaning of ‘reasonable’ as much closer to moral thinking. A claim about a reasonable action supposes sufficient information and relevant reasons, so that the claim is about what the reasons in fact support. The difference between what would be reasonable to do and what would be rational to do is not a technical one, but a familiar one in ordinary language. Scanlon (1998) argues that deciding whether an action is right or wrong, “requires substantive judgement about whether certain objections to moral principles would be reasonable”. He believes that the idea of what would be reasonable, underlies our “ordinary thinking about right and wrong” – it is “an idea with a moral content” (Scanlon, 1998:194).

Rawls (2001:7) acknowledges the influence of Scanlon on his thinking. He directly references Scanlon’s contractualist moral theory in arguing that the distinction between reasonableness and rationality is “of central importance in understanding the structure of justice”. He argues that in a system of cooperation among equals in society it would be considered unreasonable not to honour fair terms of cooperation, while it may be perfectly rational for someone with superior bargaining power to violate such terms. Rawls (2001) therefore concurs with Scanlon, when he states that the commonly accepted view is to consider “the reasonable but not, in general, the rational as a moral idea involving moral sensibility”.

Principles

Scanlon (2011) defines that “an act is wrong if it would be disallowed by any **principle** that no one could reasonably reject” (Scanlon, 2011:116). He considers the relationship between principles and reasons in the justification of actions: “to justify an action is to offer *reasons* supporting it” and a *principle* claims that these reasons “are sufficient to defeat any reasonable objections others may have” (Scanlon, 1998:197). Principles should not be taken as rules that can be applied to all questions without the exercise of judgement but should rather be considered as “general conclusions about the status of various kind of reasons for actions” (Scanlon, 1998:199). Principles may disallow actions by ruling out the reasons used to justify the actions, but in doing so there must be wide room for interpretation. Even the most familiar moral principles cannot be applied as rules without reason and judgement. When we make a judgement about the sufficiency of reasons for an action, that judgement is guided by our understanding of a moral principle. Scanlon argues that we can see the wrongness of an action if we are able to see that the principles allowing such an action, would be ones that people would reasonably reject (Scanlon, 1998:202).

Although contractualism provides a single unified definition of moral wrongness, Scanlon states that there can be an “indefinite number” of valid moral principles. The challenge for the contractualist is

to be able to define principles for unfamiliar situations. In this process we must use the same thinking underlying “the content of familiar principles like fidelity to promises and freedom of speech” (Scanlon, 1998:201).

In terms of the search for principles, Ashford and Mulgan (2012:3) compare Scanlon’s contractualism with the theory of John Rawls, who they consider to be “the most influential recent social contract theorist”. They view Rawls as “more Kantian, as he seeks principles everyone would *agree to*, rather than principles no-one *could reasonably reject*”. For Rawls (1971:11), the object of the agreement is “the principles of justice for the basic structure of society” and his search is thus for principles of social justice, as opposed to Scanlon’s search for moral principles. Rawls (1971) places the parties to the social contract behind a ‘veil of ignorance’ where they do not know anything about their own status, and therefore, based on self-interest, they would choose principles of justice that are liberal, neutral and fair. Scanlon (1998), on the other hand, insists on an “informed, unforced general agreement” (Scanlon, 1998:153) where it is “not self-interest combined with ignorance of self that makes me take account of everyone’s interests, but rather my concern to justify myself to everyone else” (Ashford & Mulgan, 2012:3).

While Rawls (1971) initially appealed to the rationality of the subjects behind the veil of ignorance to determine his principles of social justice, he was later influenced by Scanlon to (1998) revise his position to accept reasonableness as the concept involving moral sensibility (as discussed above).

Reasonable rejection

In the preceding paragraphs, the main concepts involved in Scanlon’s (2011) contractualism, namely justifiability, reasons, reasonableness and principles, were analysed. These concepts are synthesised in Scanlon’s definition of moral wrongness, namely that “an act is wrong if it would be disallowed by any principle that no one could reasonably reject” (Scanlon, 2011:116).

To say that “somebody could **reasonably reject** a principle ... means that she has a reasonable complaint to the principle”, which will only be the case if the complaint “is based on good reasons to object to the principle in question” (Southwood, 2009:926). Ashford and Mulgan (2012:4) explain that “in order to reasonably reject a principle”, a person “must have some objection to it ... [which] may begin with some harm ... suffered as result of the principle”. The negative impact is not a sufficient reason – to count as a reasonable rejection will also depend on the impact of the principle on others. Southwood (2007:927) explains that the strength of each person’s reasons for or against the principle must be weighed up: if “some other individual has stronger reasons to accept a principle ... than we have reasons to reject the principle, then it would not be reasonable ...to reject the

principle”. It would not be reasonable, for instance, to reject “principles that require us to fulfil commitments” based on the reason that it will be personally costly to us, if “those to whom we have made the commitments have stronger reasons to accept the principles, reasons based on fairness, trust, agency and so on”.

Scanlon (1998) is adamant that the only valid reasons for or against a principle, (i.e. reasons that can determine if the principle can be reasonably rejected), are “various **individuals’ reasons** for objecting to that principle” (Scanlon, 1998:229). Individuals must be objecting on their own behalf – the only claims that matter “are the claims of distinct individuals, not the claims of groups” (Southwood, 2009:927). For Scanlon, this is a central feature of contractualism, clearly distinguishing it from utilitarianism which allows the aggregation of complaints of various individuals.

Scanlon (1998) introduces the concept of “**generic reasons**”, which are not “based on the particular aims, preferences and other characteristics of specific individuals”, but that are “reasons that we can see that people have in virtue of their situation [their aims and capabilities and conditions], characterised in general terms” (Scanlon, 1998:204). The strong reasons that people have, for instance, to want to avoid bodily injury and to be able to rely on promises, are examples of generic reasons for the rejection of principles that would allow others to act against such important personal interests. Scanlon states that an “assessment of the rejectability of a principle must take into account the consequences of its acceptance in general, not merely in a particular case that we may be concerned with” (Scanlon, 1998:204).

Ashford (2003:277) argues that generic reasons help “to compare the strength of different individuals’ objections to proposed principles” in cases where the cost to well-being is the most important consideration. Firstly, since generic reasons are not based on the unique interests and preferences of an individual, they “ensure that complaints that are based on cost to well-being appeal only to interests that everyone has reasons to be concerned with” (Ashford, 2003:277). Secondly, the costs to well-being may go beyond the consequences of the actions concerned and “we cannot always know the specific ways in which various individuals will be affected”. Generic reasons are valuable if they are grounded in considerations of well-being “that are clearly of universal importance” (Ashford, 2003:279).

Scanlon (1998) admits that “in many cases, gains and losses in *well-being* (relief from suffering, for example) are clearly the most relevant factors determining whether a principle could or could not be reasonably rejected” (Scanlon, 1998:215), but this does not mean that the effect on the well-being of an individual is the only ground for objection to a principle. Scanlon (1998) is adamant that

contractualism is not based on the idea “that there is a ‘fundamental level’ of justification at which only well-being matters” (Scanlon, 1998:213). For Scanlon (1998:216), it is an important strength of contractualism that “it can account for the significance of different moral notions, within a unified moral framework, without reducing all of them to a single idea”, in contrast with utilitarianism that considers well-being “as the only fundamental moral notion”.

For Scanlon, there is *no threshold* on the level of cost that one may suffer, beyond which it would be “reasonable to reject any principle that would lead to one’s suffering a cost that is great” (Ashford, 2003:279). This is because reasonable rejection is always based on the relative strength of the various individuals’ reasons for or against a principle. A person cannot reasonably reject a principle on the basis of appealing to the cost to him alone no matter how great, if the alternative principles may impose an even greater cost on other individuals.

Ashford (2003) summarises Scanlon’s concept of reasonable rejection: “What counts as reasonable is determined solely by the goal of finding principles that no one can reasonably reject. This means that if other individuals have better reasons to reject all the alternative principles, we cannot reasonably reject a principle purely because of the burden it imposes on us” (Ashford, 2003:280).

3.4. THE SCOPE OF CONTRACTUALISM

Hooker (2002:54) points out that, while Scanlon’s contractualism in the initial article (Scanlon, 1982) was implicitly put forward “as a unifying account of *all* morality”, the scope of the theory in *What We Owe to Each Other* (Scanlon, 1998) is more restricted. Scanlon states that he was mistaken in his 1982 article when he described his project as “an investigation of the nature of morality”, since the whole range of morality is very broad (Scanlon, 1998:6). He views contractualism to be an account of a “narrower domain of morality having to do with our duties to other people ... such ... as requirements to aid them, and prohibitions against harming, killing, coercion and deception” (Scanlon, 1998:6). He refers to this domain as “the morality of right and wrong” which he calls “what we owe to each other” (Scanlon, 1998:177). He argues that this part of morality “comprises a distinct subject matter, unified by a single manner of reasoning and a common motivational basis” (Scanlon, 1998:7), which is lacking in the broader sense of morality.

Scanlon (1998) defines “the scope of the morality of right and wrong ... [to] include those beings to whom we have a good reason to want our actions to be justifiable” (Scanlon, 1998:179). This includes all beings that have the capacity for moral reasoning and to whom we therefore can justify our actions (Scanlon, 1998:180) – they are clearly the subject matter of our contractualist moral obligations. Scanlon argues that infants and young children are to be included in this category of beings that have

the capacity for moral reasoning. Excluding them from the scope of morality because they are incapable of judgement-sensitive attitudes would be too restrictive, since they “are not separate kind of creatures”. Infancy and childhood are just “stages in the life of a being who will have the capacity for judgement-sensitive attitudes” (Scanlon, 1998:185) and they are therefore beings to whom we can justify our actions.

Social contract theories normally require a set of contracting parties who can make and keep mutual and cooperative agreements - and this presents a problem in the case of entities such as animals and the environment. The broader view of morality extends beyond the narrow definition of “what we owe to each other”. In this respect, Ashford and Mulgan (2012:16-17) question whether contractualism can protect animals and future people, Southwood (2009:930) considers its limitations regarding our moral duties to “the cognitively limited and impaired”, and Hooker (2002:55) refers to the need for the moral protection of the environment and animals for their own sake.

The question of the fairness of discrimination in life insurance underwriting practices falls squarely within the domain of “the morality of right and wrong”, which Scanlon calls the “narrower domain of morality having to do with our duties to other people” (Scanlon, 1998:6). The issue of the narrower scope of Scanlon’s contractualism therefore presents no problem for the question considered in this study.

3.5. THE PROBLEM OF AGGREGATION

Aggregation is an essential element of utilitarianism, since the ‘Greatest Happiness Principle’ states that the correct action in any situation is that which brings the most happiness to the most people. This implies aggregation, since individual goods are summed up in a single measure of overall good, to find a balance between different people’s conflicting pleasures and pains.

Scanlon objects to aggregation since it can result in “highly implausible implications”, when the severe burdens placed on a few could be outweighed by the sum of a large number of very small benefits, each with little justificatory weight, provided that the beneficiaries are sufficiently numerous (1998:230). Scanlon wants to avoid aggregation in contractualism at all costs and he insists that “the justifiability of a moral principle depends only on the reasons that the *individuals* have for objecting to that principle”. He views this distinction from utilitarianism as “central to the guiding idea of contractualism” (Scanlon, 1998:229).

Ashford and Mulgan (2012:4) point out that contractualism can avoid aggregation because it is based on the concept of reasons, and not on individual pain and pleasure. This has the benefit that “unlike

my pleasure and pains, my reason can be responsive to the situation of others”. Contractualism can therefore balance the interest of different people “without some kind of aggregation”. Ashford and Mulgan (2012:5) argue that “contractualist reasons are more flexible than aggregation, as they ... respond directly to morally relevant considerations, rather than having to rely upon some complex utilitarian calculation”. As a result, contractualism “seems to offer a more satisfying explanation of *why* certain behaviour is wrong”.

In contractualism, the only reasons that can be used to reject a principle, are the objections that could be raised from the individual’s viewpoint (Scanlon, 1998:234). Scanlon provides the hypothetical example of television equipment falling on the arm of a technician in a television station during the transmission of a World Cup match. The only way to relieve the technician’s pain immediately is to interrupt the transmission for 15 minutes, inconveniencing millions of people. Scanlon (1998:235) believes that a principle that a person should be saved from serious pain and injury at the cost of interfering with the entertainment of another person, could not be reasonably rejected. No viewer could thus reasonably object on his own behalf to a break in the transmission to relieve the pain of the technician. Contractualism does not allow you to prevent minor harm to many people, at the cost of serious harm to one or to a few people. For Scanlon, this conclusion conforms better with intuitive moral appeal than the converse result of utilitarianism via aggregation.

Scanlon (1998) admits that contractualism may appear to err in the opposite direction, by disallowing any appeal to aggregation of benefits. This can be problematic when the correct action does seem to depend on the number of people affected. If contractualism accepts as reasons for rejection only those reasons arising from individual standpoints, it is very difficult “to explain how the number of people affected by an action can ever make a moral difference” (Scanlon, 1998:230).

Scanlon (1998) provides an approach to cases where there is a choice between assisting either a greater or a smaller number of people, who all face harm of *similar* moral importance. Consider a situation of people stranded on two separate rocks in the rising tide, with a boat that can only reach one rock in time to save its occupants. If there is one person on each rock, then neither could reasonably reject a principle which allows the other to be saved – their individual claim to be rescued would cancel each other out. In this tie, it will be permissible to save either of the two. If there is a second person on one rock, however, Scanlon (1998) argues that the needs of this second person must have the power to break the tie. Any principle that does not recognise the presence of the second person as making a moral difference, could reasonably be rejected, because such a principle “would not give positive weight to each person’s life” (Scanlon, 1998:233). This tie-breaker argument provides contractualism with a principle according to which one must aid the larger group.

Ashford and Mulgan (2012:9) refer to the problem “where the burdens that different persons stand to suffer are unequal – and so cannot ... cancel each other out”, such as the choice between one person suffering agony for 100 days, and 100 people suffering agony for 99 days. From the individual perspective, the first person’s complaint (against suffering for 100 days) “outweighs the complaint of any other single individual” against suffering for 99 days. To address this issue, Scanlon (1998) argues that the distinction should be “between broad categories of moral seriousness” and that slight differences “such as a pain lasting a little longer or a person losing two fingers rather than three, do not make a difference between a very serious loss and a moderate one” (Scanlon, 1998:238). In this example, the tie-breaker argument would therefore favour the complaint of the 100 people. Ashford and Mulgan’s (2012) requirement that the complaints should be “on par” before “an appeal to ...[the] tie-breaking method” can be used (Ashford & Mulgan, 2012:9), is less convincing than Scanlon’s argument for using broad categories.

Based on the above examples, Scanlon’s (1982) contractualist principles can offer answers in three types of cases: those involving harm of *very different* degrees of seriousness (saving one at the cost of inconveniencing many), those where the harm in question is serious and of the *same degree* (saving more lives rather than only one), and those where the harm is in a *similar broad category* of seriousness.

Scanlon (1998:240) argues that an appeal to the tie-breaking argument will still hold if the choice is between saving one life or saving another life while at the same time preventing someone from being paralysed for life. He admits that the situation is more difficult if the choice lies between preventing one very serious harm and a number of less serious ones. In such a case, the principle that requires one always to prevent the more serious harm “could reasonably be rejected ...[by] someone in the other group on the ground that it did not give proper consideration to his admittedly less serious, but still morally relevant, loss” (Scanlon, 1998:240). Scanlon admits that such a claim “can only be met by a principle that is sensitive to the numbers involved on each side” (1998:240) – thereby effectively conceding to some form of aggregation. Hooker (2002:74) sees serious problems with this appeal by Scanlon to moral relevance, which would “allow greater numbers to matter in some cases but not in others”. Hooker (2002) discusses alternative solutions offered by Norcross, Kamm and Parfit, for example that “priority should be given to the worst-off individual” or “that weight should be given to equality of distribution” However, such changes would mean that contractualism “would be making considerable moral assumptions” and thus be “scaling back on its explanatory ambitions” (Hooker, 2002:74).

Scanlon (1998) remains hopeful that it may be possible to find “a less tightly constrained version of contractualism” with a structure for individuals interests to be taken into account, which may provide “aggregative principles that would apply to a wider range of cases in which harms on each side were not equally serious” (Scanlon, 1998:241).

In this study, the problems that contractualism has in certain circumstances because of its adamant rejection of aggregation, do not present an obstacle in the consideration of the fairness of premium discrimination in life insurance. In the life insurance underwriting process, the individual risk characteristics of each applicant (in terms of age, sex, lifestyle, health, etc.) are considered. The justifiability of a moral principle that depends only on the reasons that individuals may have for objecting to that principle, is therefore a very suitable approach for the consideration of any complaint against unfairness in premium discrimination.

The purpose of the calculation of a different premium rate for each person based on the discrimination into risk categories, is to determine the cheapest financially sound premium required for each person. This actuarial calculation is effectively a sophisticated form of aggregation, meant to maximise the total well-being of the pool of policyholders. The purpose of this study was to consider the fairness of premium discrimination inherent in the underwriting criteria. If the premium discrimination is in fact based on aggregation, it can be argued that a theoretical moral lens *not* based on aggregation would be preferable to critically challenge current practices. Scanlon’s (1982) contractualism therefore provides a convincing theoretical alternative to an approach to moral decision-making based on aggregation, such as utilitarianism.

3.6. THE OBJECTION OF CIRCULARITY

Ashford and Mulgan (2012:7) describe the circularity objection to contractualism in simple terms: “Contractualism says x is wrong if ... x is forbidden by principles no one can reasonably reject... A principle that no one can reasonably reject is a principle that permits no actions that are wrong. If we do not already know which actions are wrong, then we cannot use the contractualist apparatus. But if we do already know which actions are wrong, then we don’t need to use it.”

This formulation of the objection is almost simplified to a Kantian analytic statement¹⁹ of the form: “The act is wrong because it is wrong”, which is an uninformative tautology. The problem is better exemplified when Ashford and Mulgan (2012:7) use the concept “unfair” instead of “wrong”. Here they state that “contractualism allows the reason ‘*because it treats me unfairly*’ to count as a reason

¹⁹ An analytic statement is true by definition, such as “A daisy is a flower”.

for rejecting a principle". The contractualist would thus effectively claim that the act is wrong because it is unfair, which (while not an analytic statement) is open to the objection of circularity, since it seems that our moral view of fairness is doing the real moral work.

Hooker (2002:57) strongly criticises Scanlon's contractualism as circular, stating that it acts as "a spare wheel, a construct that spins but does not actually bear any weight or do any work". He objects that contractualism "doesn't explain what makes wrong acts wrong but instead presupposes their wrongness". In Hooker's view, Scanlon's aspiration to find "a fundamental moral principle that unifies moral requirements", falls into the trap that "the fundamental principle coheres with our moral conviction only because it presupposes them" (Hooker, 2002:57).

Hooker (2002) points out that a similar objection has been raised against Rawls's contractual account of justice (Hooker, 2002:58). His objection is that Rawls "relies on moral assumptions in his design of the 'original position' in which people are contracting with one another". The problem is that "the parties in the original position are motivated in such a way that the contract generates the results that Rawls intuitively thinks right". The corresponding charge against Scanlon is that the contractual principle will provide the intuitively right conclusion, only by relying on "moral intuitions that have not yet been validated by the contractualist test" (Hooker, 2002:58). The problem for Hooker in both cases is that "moral distinctions are serving as input to the contract, rather than its output".

Scanlon (1998) admits that if contractualism appeals to any prior notion of rightness to decide what considerations are morally relevant for reasonable rejection, then the whole framework may be considered redundant, since the prior notion would do all the work (Scanlon, 1998: 213). Ashford and Mulgan (2012:7) point out that any appeal to reasons beyond well-being tends to give rise to the circularity objection. Scanlon (1998) agrees that the charge of circularity stems mainly from the (unfounded) view that "the claims of well-being are unique among moral claims in needing no further justification" (Scanlon, 1998:215). Scanlon (1998) argues that it is "misleading to suggest that when we are assessing the 'reasonable rejectability' of a principle, we must ... set aside assumptions about other rights and entitlements altogether" (Scanlon, 1998:214). Contractualism does not support the idea that only well-being provides a fundamental level of justification, but instead it gives independent weight to other moral concepts. For contractualism, considerations of responsibility, fairness and arbitrariness can provide a perfectly understandable reason for the rejection of a principle, where the reason does not depend on the prior idea that practices permitted by such a principle are wrong (Scanlon, 1998:216). The contractualist moral argument would therefore not be circular.

Scanlon (1998) refers to an extreme example raised by Judith Thomson,²⁰ namely of torturing babies to death just for fun. She believes that this act is not wrong because it would be disallowed by any set of principles which no one could reasonably reject, but rather that the blatant wrongness of the act would explain why there would be general agreement to a principle that would disallow it. Scanlon defends the contractualist formulation against the circularity charge, by arguing “what makes an act wrong are the properties that would make any principle that allows it, one that it would be reasonable to reject (in this case the needless suffering and death of the baby)” (Scanlon, 1998:391).

Despite his outspoken objection of circularity, Hooker (2002:60-62) provides a stronger defence for contractualism than Scanlon does for Thomson’s example. He argues that contractualism has the benefit of a two-level approach. On the first level, acts can have “properties that count ... against the moral permissibility of any act that has one or more of these properties” - like acts that kill, torture, harm or fail to rescue someone. Hooker (2002:60) states that “some deontologists tend to stop at that level and claim there is no explanation why some properties count morally against an act” - divine command and natural rights proponents would fall in this category. Contractualists, however, “can offer another, deeper level of explanation - they can *explain why* certain properties count ... strongly against the moral permissibility of an act” (Hooker, 2002:61). They can explain that “principles no one can reasonably reject would tell agents to avoid acts with any of the set of properties” (Hooker, 2002:61). For Hooker (2002), the attraction of such a two-level moral theory is that it can “endorse principles whose implications match our confident convictions about which acts are right and which acts are wrong, and yet go on to provide an explanation of why these principles are justified” (Hooker, 2002:62).

Scanlon (1998) summarises his defence against the objection of circularity in a positive statement that echoes the benefit of the two-level approach described by Hooker. For Scanlon (1998), it is “an important strength of contractualism that, in contrast to utilitarianism and other views which make well-being the only fundamental moral notion, it can account for the significance of different moral notions, within a unified moral framework, without reducing all of them to a single idea” (Scanlon, 1998:216).

For the consideration of the fairness of discrimination in life insurance premium rates when conducting this study, this strength of contractualism, namely that it can appeal to reasons beyond

²⁰ Discussed on p30 in *The Realm of Rights*. Harvard University Press, 1990.

well-being, provided the opportunity to consider different principles for the evaluation of the different underwriting criteria.

3.7. THE ISSUE OF DEMANDINGNESS

Impartial moral theories like consequentialism are often found to be excessively demanding. Where the basic needs of millions of poor people in the world are not met, utilitarianism puts a great burden on those of us who are able to help. It requires us to do the most good and promote the well-being of the needy, even at the expense of our own activities and the welfare of our family and friends. This claim goes against common intuition – most people do not believe that we have a moral duty to spend all our time, resources and energy on charity. Ashford and Mulgan (2012:11) acknowledge demandingness as a serious objection to utilitarianism and state that avoiding this fate would give contractualism a significant advantage.

In considering demandingness, there is a distinction to be drawn between the duty of rescue and the duty of justice, as exemplified by Singer's life-saving analogy.²¹ Scanlon (1998) believes that it would be wrong not to give assistance, if we can, to those in severe difficulty (for example people starving, in great pain, or in mortal danger). He defines the 'Rescue Principle' as one that could not reasonably be rejected: "[If] you can prevent something very bad from happening ... by making only a slight (or even moderate) sacrifice, then it would be wrong not to do so" (Scanlon, 1998:224). This principle does not seem too demanding.

Scanlon (1998:224) admits that the 'Rescue Principle' may not fully define our obligation to help others and that stronger principles may require higher levels of sacrifice. One such principle as suggested by Ashford (2003:287), is the 'Stringent Principle': "If we can prevent something very bad from happening to someone by making a great sacrifice, it would be wrong not to do so". It would be difficult to reject this very demanding principle if the 'very bad' thing (for example an agonising death) is significantly worse than the 'great sacrifice'.

Ashford and Mulgan (2012:11) argue that contractualism could "generate very demanding principles as it seems reasonable for those who are starving to reject any principle permitting me to retain any inessential resources rather than meeting their most basic needs". According to Thomas Nagel, "it may be impossible to construct any set of principles [regarding aid] which no one could reasonably

²¹ In *Famine, Affluence and Morality*, Peter Singer (1972) develops his life-saving analogy, based on the sacrifice principle that "if it is in our power to prevent something bad from happening ... we ought, morally, to do it". He argues that the principle imposes a moral duty on us to save a drowning child from a shallow pond, which is a duty of rescue. Analogous to this, Singer argues that we have a duty to save the poor from starvation. This is a duty of justice.

reject”, since “any principle of aid would either make unreasonable demands on the affluent ... or pay inadequate attention to the basic needs of the destitute” (cited in Ashford & Mulgan, 2012:11).

Southwood (2009) argues that contractualism is less demanding than utilitarianism in our duties towards people. Southwood (2009) suggests that a possible contractualist defence against demandingness would be to “show that the privileged have additional reasons for them to object to demanding principles”, for example that the principles impinge unduly on their autonomy or that the privileged are treated as a means rather than an end. He is sceptical, however, that the costs to the privileged can be “sufficient to outweigh the reasons of the starving for insisting on demanding principles” (Southwood, 2009:932). Ashford and Mulgan (2012:12) suggest that the most promising defence for contractualism against an accusation of demandingness lies in its pluralism (as discussed below), since the basis for the rejection of a principle need not be limited to the effect of the burden on the agent’s well-being. He can object to a principle that requires him to spend all his resources on charity because it fails to respect him as a person, by denying him the right to his own personal projects. Southwood (2009) agrees that, because contractualism can provide justification for many personal prerogatives, “it is not so excessively demanding [and] gives individuals adequate freedom to live as they see fit” (Southwood, 2009:932).

For Ashford (2003), the fact that a moral theory can sometimes be extremely demanding “is not in itself a forceful objection to it” (Ashford, 2003:274). She views her argument not as a criticism of Scanlon’s theory, but rather as an indication that “in the context of emergency situations, and our ... obligations to help those in need, any impartial moral theory is liable to be extremely demanding”.

It is fair to conclude that, although probably less burdensome than utilitarianism, contractualism could generate very demanding principles in extreme situations of mortal danger or where basic human survival is at stake. However, regarding this study, the issue of premium discrimination in life insurance is clearly not a situation involving any mortal danger or basic survival, and therefore demands neither a duty of rescue nor a duty of justice. The demandingness of contractualism is not a relevant concern in terms of the moral problem investigated for this study.

3.8. THE QUESTION OF PLURALISM

The dictionary²² defines ethical pluralism (or value pluralism) as “the idea that there are several values which may be equally correct and fundamental, and yet in conflict with each other”. Value-pluralism is described as an alternative to ethical monism, which contends that one system of morality is

²² New World Encyclopedia.

universally applicable. The pluralist view is that one should consider and apply many different ethical concepts and theories to reach a reasoned ethical decision.

Contractualism, like utilitarianism and Kantian deontology, is a theory that aims to provide one universally acceptable system of morality. In contractualism, Scanlon (1998) offers “an account of one central component of morality, ‘what we owe to each other’” (Scanlon, 1998:360), grounded on a singular view of the source of moral motivation as “the desire to be able to justify one’s action to others on grounds that they could not reasonably reject” (Scanlon, 1982:116). As such, it should be viewed as a form of ethical monism in that it poses one unified moral framework.

On the other hand, Southwood (2009:926) describes Scanlon’s contractualism as “explicitly pluralist” since it allows for many “considerations that constitute good reasons to accept or reject principles”. Scanlon (1998:216) views the fact that contractualism “can account for the significance of different moral notions, within a unified moral framework, without reducing them to a single idea” as an important strength of his theory. Ashford and Mulgan (2012) concur that the ‘pluralistic’ ability of contractualism to “capture the wide range of considerations that are relevant to moral deliberations”, is an advantage. At the same time, they contend that this “plurality of considerations is nevertheless *unified* by a single normative domain or subject matter: unjustifiability” (Ashford & Mulgan, 2012:7).

For utilitarianism, the promotion of overall well-being is the only central moral value. Contractualism can accommodate this consequentialist aspect, since part of what we owe others is to promote their well-being. To know whether you can reasonably reject a principle, you must consider the negative impact that it can have on your own well-being, as well as the well-being of others. While contractualism can accommodate considerations of well-being, it is not limited to this single moral notion. Contractualism removes the elevated status of well-being above other moral notions, as Scanlon (1998) explains: “a person could reasonably reject a principle on the grounds that it treated him or her unfairly.... even if this treatment did not make the person worse off” (Scanlon, 1998:229). Similarly, a principle that allocates burdens based on race may be rejected because the use of racial grounds fails to respect the person, regardless of whether it has a negative effect on his well-being (Ashford & Mulgan, 2012:5). The contractualist framework can account for moral notions not available to utilitarianism (Scanlon, 1982:119), such as rights, responsibility and procedural fairness, while considerations such as having your freedom or autonomy undermined can also be good reasons for rejecting a principle. Miller (2002:195) comments that Scanlon does not “offer a complete list of the diverse relevant reasons to object to regulative principles”, but that he does provide a “repertoire of relevant reasons to complain [against] wrongness.” In addition to reasons provided by Scanlon, Miller includes “arbitrariness, the failure to acknowledge the equal value of one’s existence,

insufficient scope for ... personal commitment to [worthy] values, the value of choice, the value of assurance, and the value of trust". Within a framework of ethical monism, contractualism can therefore account for many different moral notions.

Scanlon (1998:189) believes that the contractualist concept that an act is right only if it can be justified to others, should also appeal to utilitarians. If they consider an act to be right if it satisfies the utilitarian formula of promoting the maximum well-being, then they should also consider that such an act would be justifiable to others. For utilitarians, what makes an act right is having the best consequences for everyone affected, and justifiability would be such a consequence. Ashford and Mulgan (2012:4) point out that the contractualist accommodation of utilitarian considerations provides "an advantage of contractualism over ... Kantian ethics, which rejects all consequentialist reasons and thus makes it very difficult explain why the consequences of our actions have any moral significance".

While contractualism can allow for many different moral notions, the central positive argument of the theory is its definition of moral wrongness, based on the concept of justifiability to others on grounds that they could not reasonably reject. This core concept of contractualism imparts "the unity of a single normative domain" to the "plurality of moral considerations" (Wallace, 2002:450). To resolve any conflict between principles based on different moral notions, judgement is needed to weigh up the strength of each person's reasons for or against a principle. If A has stronger reasons to accept a principle than B's reasons to reject that principle, then B could not reasonably reject the principle. Scanlon (1998) states that substantive judgement is required about the suitability of a moral principle and whether objections against a possible moral principle would be reasonable (Scanlon, 1998:194). He stresses that "even the most familiar moral principles are not rules that can be easily applied without appeals to judgement" (Scanlon, 1998:199). Resolving value conflicts is therefore contingent on judgement (as evaluated against the criterion of reasonableness). Deciding on the stronger principle may sometimes prove difficult, but the plural nature of moral considerations within a contractualist frame is not likely to degenerate into moral relativism, since the moral decision-making and judgement is always guided by the regulative idea of what we owe to each other.

The pluralistic strength of contractualism makes it very suitable for the consideration of the fairness of the different criteria of premium discrimination in life insurance underwriting. It helps to escape the narrow bounds of well-being and thereby allows for a fuller picture of moral considerations.

The challenge when conducting this study was to determine, for each of the underwriting aspects, whether it is possible or not to define principles of justification that cannot reasonably be rejected.

3.9. THE APPEAL OF CONTRACTUALISM

For Ashford and Mulgan (2012:6), the appeal of contractualism is “that it presents a genuine alternative to both consequentialism and Kantian ethics”. This echoes the sentiment of Matravers (2002:1), who considers Scanlon’s “fully fledged contractualist moral theory” to be “rivalling others such as utilitarianism and deontology”.

It is therefore necessary to consider the validity of what Scanlon (2011:116) calls the “striking claim of convergence between Kantian, consequentialist and contractualist moral theories” in the so-called ‘triple theory’ of David Parfit (2011a). Ashford and Mulgan (2012:5) comment that Parfit’s theory “would be a very significant result” if it would mean that contractualism cannot present itself as a genuine alternative to consequentialism and deontology.

Parfit begins his triple theory argument with his own reformulation of Kantian universalisability, namely that “everybody ought to follow the principals whose universal acceptance everyone could rationally will” (Scanlon, 2011:116). Parfit’s next step is to converge Kant with consequentialism, into what he calls “Kantian rule consequentialism” which holds that “everyone ought to follow the principles that are optimific,²³ because these are the only principles that everyone could rationally will to be universal laws” (Scanlon, 2011:411). To also include contractualism in the convergence, Parfit must show that “the optimific and the universally willable principles are the only set of principles that no-one could reasonably reject” (Ashford & Mulgan, 2012:6). He does so by arguing that “since it is only the optimific principles that everyone could rationally choose, no one could reasonably reject these principles” (Parfit, 2011b:245). Parfit’s resulting ‘triple theory’ thus states that “an act is wrong just when such acts are disallowed by some principle that is optimific, uniquely universally willable, and not reasonably rejectable” (Parfit, 2011a:413).

For the convergence argument to hold, however, Parfit (2011b:244) requires that two significant restrictions be removed from Scanlon’s theory, namely that “justifiability of a moral principal depends only on individuals’ reasons for objecting to that principle” (Scanlon, 1998:229), and that “impersonal values are not themselves grounds for reasonable rejection” (Scanlon, 1998:222). In his convergence argument, Parfit therefore “replaces Scanlon’s original formulation of contractualism, where all reasons for rejection must be the personal complaints of specific individuals”, with a more impersonal version (Ashford & Mulgan, 2012:5). This is necessary because Scanlon’s contractualism allows “an individual to reject the optimific principle whenever they place a greater burden on her than her own preferred principle places on any other single individual”. The convergence theory, on

²³ Producing the optimum outcome or the best possible result.

the other hand, does not allow the single individual to reject the optimific principle and may instruct us to provide small benefits to many (Ashford & Mulgan, 2012:6).

Ashford and Mulgan (2012:6) conclude that it may rightly be argued that the convergence argument is of little relevance, because the impersonal version of contractualism formulated by Parfit abandons the core commitment of Scanlon's contractualism. In their view, the provocative claims of Parfit's convergence argument are "quite modest": it does not prove "that rule consequentialism, Kantian ethics and contractualism necessarily coincide", but rather "that plausible versions of the three theories do not necessarily conflict" (Ashford & Mulgan, 2012:6). For Parfit (2011b:295), an important deduction from his triple theory is that "the most plausible [moral] theories have similar implications ... and that these are the theories that we should try to develop further".

As a theoretical contender to utilitarianism and Kantianism, Southwood (2009:930) reflects that an advantage of contractualism is that it "appears to tread an attractive middle path between a number of hazardous extremes" and concludes that "it is not surprising that many people find it appealing".

Throughout this chapter, contractualism has been critically contrasted with utilitarianism, which can be considered as its main theoretical rival. The points of convergence and divergence should be clear at this juncture.

3.10. THE CHOICE OF CONTRACTUALISM

The key features and strengths of Scanlon's contractualism, as discussed in this section, serves to support the choice of contractualism as an appropriate moral lens for analysing the question of the fairness of discrimination of life insurance premiums. Scanlon provides an appealing new non-consequentialist moral theory, grounded on the rational moral agency of people. While utilitarianism covers all of morality, the scope of contractualism is limited to our moral duties to other people (those to whom we can justify our actions) and excludes the environment and animals (to a considerable extent). Unlike utilitarianism, contractualism is not limited to one central moral notion: it can accommodate the utilitarian moral principle of well-being and the deontological intuition of respect for the individual, together with a wide range of other moral notions. This plurality of considerations is unified by contractualism's single moral framework of justifiability. The central positive feature of contractualism is its definition of moral wrongness, based on the concept of justifiability on grounds that cannot reasonably be rejected. Contractualism shuns the utilitarian approach of aggregation and so avoids its undesirable implications. As a result, contractualism is more flexible, since it can respond more directly to morally relevant individual reasons for justification and rejection. Like utilitarianism, contractualism is an impartial theory, which can create very demanding claims, but because

contractualism can provide justification for many personal prerogatives, it is not so excessively demanding. The central strength of contractualism lies in its pluralistic ability of capturing a wide range of different moral notions within a unified moral framework, without reducing them to a single idea.

Scanlon's (1998) contractualism is based on the concepts of reasons and justifiability. The consideration of the fairness of differentiation in life insurance underwriting will be a search for principles of underwriting "that can be justifiable to others on grounds that they cannot reasonably reject" (Scanlon, 1998:5).

CHAPTER 4

JUSTIFICATION OF UNDERWRITING PRACTICES

4.1. THE PROBLEM OF DISCRIMINATION

While most reasonably informed people would be aware that life insurers differentiate between applicants, few would realise the extent of the discrimination, or be able to quantify it. The comparison in Section 1.2, between the cover provided in South Africa to different individuals on the same life insurance product, quantifies the severe extent of discrimination. It shows that a high-income young woman effectively gets almost seven times more life cover than a middle-income middle-aged man, who in turn gets seven times more cover than a low-income old man, for the same premium. The rich young woman gets almost 50 times more life cover than the poor old man, for the same premium on the same product. This extreme difference in benefits provided to different people may be considered unfair and discriminatory (in the negative sense of the word) by many observers.

Any objection against premium discrimination in South Africa is likely to be exacerbated by the fact that it does not only benefit the young and healthy relative to the old and sick as in most other countries, but it also benefits the privileged rich sector of the population at the expense of the underprivileged poor. This runs counter to the generally accepted approach in civilised communities where discrimination is designed to favour the needy: the rich pay taxes at higher rates than the poor, and the needy receive subsidies and grants not provided to the rich. The first justice principle for Rawls is equality. His second justice principle, the difference principle, states that “all social primary goods...are to be distributed equally unless an unequal distribution ...is to the advantage of the least favoured” (Rawls, 1971:303). The underwriting approach of the insurance industry, particularly in South Africa, seems to be in direct opposition to Rawls’s difference principle.

The aim of this study was to consider the fairness of the discrimination in life insurance premium rates and the justification of the underwriting practices resulting in this discrimination, through the moral lens of Scanlon’s contractualism which is based on the concepts of reasons and justifiability. The consideration of the fairness of discrimination in life insurance underwriting constitutes a search for principles of underwriting that can be justifiable to others on grounds that they cannot reasonably reject. Various aspects of the current underwriting practice can then be tested against these principles.

4.2. A FRAMEWORK OF JUSTIFICATION MODES

Considering the issue of genetic discrimination in life insurance, Liukko (2010:4590) points out that there are many conflicting methods that may be used for justifying fair principles for discrimination

in life insurance underwriting. To address this dilemma, he uses a framework for situations of public dispute developed by Boltanski and Thevenot (1999) as an analytical tool. This framework searches for common acceptability and a higher level of generality for modes of justification, by referring to the concept of a *common good*. Boltanski and Thevenot (1999) define six different justification modes,²⁴ where each imply “a distinct principle of differentiating and ranking individuals by appealing to a [different] common good” (Liukko, 2010:460). The four justification modes relevant for this analysis are derived from the “industrial”, “civic” “market” and “opinion” worlds, each with its own common good or “mode of worth” (Boltanski & Thevenot, 1999:368). In *industrial logic* the common principle is *efficiency* (where judgement rests on professional competency and technical criteria); in *market logic* the common principle is *competition* (where judgement is based on price, monetary value, fair deals); in *civic logic* the common principle is *collective interest* (with judgement taking the form of voting and agreements based on equality); and lastly, in *opinion logic* the common principle is *public opinion* (with judgement resting on popularity, influence, renown) (Liukko, 2010:460).

Boltanski and Thevenot (1999:367) explain that the shift from one mode of justification to another (each with a different “order of equivalence” implied by a different concept of common good) creates a tension, “since persons are equal with regard to their belonging to humanity while being placed within a hierarchy according to a specific principle of order”. Liukko (2010:460) remarks that this tension “resembles the basic tension in risk classification” in life insurance, where the “apparent incompatibility of the logic of different justifications” requires “manifold compromises”, and states that the Boltanski / Thevenot (1999) framework highlights these compromises.

In this regard, an important strength of contractualism is that “it can account for the significance of different moral notions, within a unified moral framework, without reducing all of them to a single idea” (Scanlon, 1998:216). The different modes of justification in the Boltanski / Thevenot (1999) framework can thus be accounted for and evaluated using Scanlon’s theory. To count as a reasonable objection against a principle in contractualism, the comparative strength of other reasons in favour of the principle must be weighed. If there are stronger reasons to accept a principle than reasons to reject that principle, then the principle could not reasonably be rejected. Thus, for example, the strength of justification based on industrial logic may in some instances be outweighed by that of civic logic.

Before considering the fairness of the discrimination based on various specific underwriting factors in private insurance, it is necessary to consider the fairness of discrimination in the pricing of life

²⁴ The six justification modes stem from the “inspired”, “domestic”, “industrial”, “civic”, “market” and “opinion” worlds.

cover *per se*. This is essentially an evaluation of the fairness of the solidarity insurance model used for social insurance versus the fairness of the mutuality insurance model used for private insurance (see Section 2.3).

Social insurance and private insurance share the common objective of providing security through the pooling of risk. According to Ericson, Doyle and Barry (2003 cited in Liukko, 2010:467), both social and private insurance provide social justice as “distributive justice in the form of collective sharing of burdens” and “restorative justice as indemnification, whereby the [financial] loss of one is suffered ... by all”. However, in social insurance no difference is made in price to reflect the difference in risk, while in private insurance all participants are charged according to their level of risk. Underlying the question of fairness in this comparison is the basic tension between the two related fairness concepts of *equity* and *equality*, and the Boltanski / Thevenot (1999) framework proves a useful tool to illuminate the competition and compromises between the reasoning and the logic of the different justifications.

4.3. JUSTIFICATION OF ZERO DISCRIMINATION IN SOCIAL INSURANCE

In a positive analysis of prominent justice theories, James Konow (2003) identifies distinct elements of justice. He defines four theoretical categories into which each of the variety of justice theories can be placed. The category of *Equality and Need* (Konow, 2003:1189), covers “theories that incorporate a concern for the well-being of the least well-off members of society”. These theories inspire what Konow (2003) defines as the *Need Principle*, “which calls for the equal satisfaction of basic needs”.

In a social insurance scheme, the aim is the satisfaction of a basic need for insurance. Social insurance typically provides some basic minimum level of life cover to everybody in society, without any attempt of risk classification and discrimination. Liukko (2010:463) states that solidarity (which he calls “subsidized solidarity” – see Section 2.3) is “the norm in statutory social insurance ... where the whole insured population forms one unified risk pool, each member having an equal-rated chance of solidarity”.

The prevailing justice principle in the case of social insurance is equality. In the solidarity model of insurance there is no discrimination in underwriting and all members pay the same contribution rate for the same amount of life cover, regardless of their level of risk. In terms of the Boltanski / Thevenot (1999) framework, the prevalent justification mode for social insurance is that of civic logic, with its common principle of collective interest. Judgement, as stated, takes the form of voting and agreements, based on equality. In the case of social insurance, the issue to be considered is not an

evaluation of the justification of discrimination in risk underwriting, but rather the justification for the *lack* of discrimination between different population groups.

In terms of Scanlon's contractualism, the Insurance Solidarity Principle which I define below, can be used to justify the provision of social insurance on a basis which does not discriminate between participants on their individual level of risk:

The Insurance Solidarity Principle

If a society can afford to, it has a duty to provide a basic minimum amount of life cover for all its citizens on an equal basis. The life cover should cover at least the cost of a basic funeral for the deceased, and possibly also part of the immediate living cost of dependants of the deceased.

This principle would be difficult to reject on any reasonable basis. The affordability proviso ensures that very poor societies lacking even more basic needs would not be burdened. Stating that "society... has a duty to provide" effectively means that it should be done by government. "All citizens" implies universal (compulsory) participation, which may for practical reasons be limited to adults (and possibly to prevent the risk of infanticide). "On an equal basis" would mean a complete lack of discrimination and classification. The scheme would provide the same amount of life cover for everybody and require the same level of contributions by everybody (which includes the option of funding from taxation, with no individual contribution).

The Solidarity Principle implies a social insurance scheme that would meet the *Need Principle* of justice theories in the *Equality and Need* category as defined by Konow (2003), which calls for the equal satisfaction of basic needs. Such social insurance would meet a basic need in society and the level of life cover provided would be a matter of social and political decision making. It can be argued that the most basic need of life cover is to provide for a decent burial, which is a serious financial burden for families in poor communities. Such funeral cover may rightly be viewed as a primary social good²⁵ to which everybody should have access.

In a compulsory scheme with equal contributions, financially destitute people with no income could reasonably object to a compulsory contribution towards the "luxury" of life cover. Funding those unable to contribute from taxation, would address this objection. This would create a burden on the

²⁵ See Section 2.7.

fiscus, but it would be difficult for any individual to raise a reasonable objection against such a cost on his own behalf.

In a scheme with equal contributions, the lack of any underwriting discrimination means a cross-subsidy of the higher risk participants by the lower risk participants (i.e. old by young, male by female, impaired by healthy, etc.). It would, however, be difficult to raise a reasonable objection against the civil logic of communality and equality implicit in this cross-subsidy in a social scheme, with its compulsory participation and equal benefits meeting a basic social need. (In a non-contributory scheme, it is difficult to argue that any cross-subsidy exists between members, since all members are being subsidised by the state).

With compulsory life-long participation, the age-related cross-subsidy (of the old by the young) can also be justified in terms of industrial logic, namely that the young now doing the subsidising, will in time become the old and will then in turn be subsidised. The same logic holds true to some extent for the healthy who may later become sick – and since participation is compulsory, there can be no adverse selection at inception.

The conclusion is therefore that in the social security environment (with compulsory population-wide participation, the same limited amount of life cover for all to address a basic need, and no individual choice involved) the approach of equality, based primarily on civic logic, can be justified.

Even though South Africa has a substantial social welfare system, with more than 17 million social grants being paid monthly, it does not have any comprehensive social insurance scheme. It has been the stated intention of the South African government from as far back as 2007 to provide basic life cover and other benefits through a compulsory National Social Security Fund (NSSF):

There is a well-established case for the collective provision of basic insurance against catastrophic events, such as death, disability and unemployment, through a mandatory social security arrangement. Mandatory, universal participation in a pooled social insurance arrangement recognises that those who are most vulnerable will tend to be excluded if participation is subject to selection and choice. If everyone is to enjoy equal, basic protection against life crises, participation has to be obligatory.²⁶

²⁶ RSA National Treasury *Social Security and Retirement Reform: Second Discussion Paper*, February 2007, par 34.

However, a lack of consensus between government, labour and business on issues mainly related to retirement provision, has thwarted any real progress towards the implementation of the proposed NSSF.²⁷

The conditions of social insurance described in this section do not hold for private insurance as a voluntary mechanism of individual responsibility, with its freedom of choice regarding participation and no limit on the amount of cover selected. Under these conditions, *equality* is difficult to justify, and the search should be for the justification of *equity*.

4.4. THE ARGUMENT FOR THE MARKET NECESSITY FOR DISCRIMINATION

The primary justification by the insurance industry for discrimination in underwriting is *actuarial equity* or *fairness*, aimed at the fair treatment of the individual participants, which is considered in detail in Section 4.5. The other strong justification provided for discrimination is the argument of its *necessity* to ensure the financial soundness of the insurance company, because it avoids the risk of adverse selection by insurance applicants.²⁸ In the open market of private insurance this is an example of justification based on market logic, which includes the basic economic principles of profitability, competitive pricing and freedom of contract (Liukko, 2010:460). While the economic health and survival of the insurance industry is also in the interest of the individual and may necessitate premium discrimination by insurers, it is not an argument that can be used to prove the fairness of premium discrimination.

This financial soundness argument holds true on the individual company level, where failure to recognise the differences in mortality risk of individuals can lead to adverse selection against that company, but it does not hold true on an industry level. If all companies, for instance, were to be prohibited by law to discriminate between smokers and non-smokers, then there could be no adverse selection against any one company. The only effect would be that there would be an industry-wide cross-subsidy from the low-risk non-smokers now paying more, to the high-risk smokers now paying less. At most this could lead to some increase in premiums for all, which would negatively affect the insured population rather than the insurer. The exaggerated opinion offered by O'Neill (2006:570) that "rational action by high-risk and low-risk individuals will have the combined effect of driving up insurance prices to such a level that it is irrational for all but the most high-risk individuals to take out insurance" is unfounded. His conclusion that such "information asymmetry leads to adverse

²⁷ Discussions effectively stalled at NEDLAC (the National Economic Development and Labour Council). The latest input from government is a discussion paper in November 2016 by the Inter-Departmental Task Team on Social Security and Retirement Reform.

²⁸ As described in Section 2.5.

selection, which leads to market failure” can be dismissed as apocalyptic, for all underwriting factors except age. The industry existed profitably for many decades using only age as underwriting factor. Ample evidence of the resilience of the insurance industry was provided when the European Union legally forced the retro-active introduction of unisex premium rates in 2012,²⁹ and the industry handled the transition with little upheaval.

4.5. JUSTIFICATION OF THE *PRINCIPLE OF DISCRIMINATION IN PRIVATE INSURANCE*

Insurance as a social good in South Africa

The issue of fairness in risk discrimination in private insurance is linked to the question posed by Liukko (2010), namely “to what extent can private insurance be perceived as a basic social right” (Liukko, 2010:468). In terms of Sandberg’s definition, the question can be rephrased as whether life insurance in South Africa should be considered a primary social good or a non-primary social good.³⁰

In European countries, where social insurance plays a prominent role in providing for the basic needs of society, Sandberg argues that private insurance should be considered a non-primary social good. In the absence of a social insurance scheme in South Africa, it would be possible to view some basic level of private insurance, such as funeral insurance,³¹ as a primary social good. On the other hand, it would not be reasonable to regard life cover to the value of say R1 million as a primary social good, since it cannot be “considered so important that access to [that] must be guaranteed to all members of society” (Sandberg, 1995:1554).

This study has accepted that some basic form of social insurance should and will be introduced, and that private life insurance in South Africa should be regarded as a non-primary social good, with the implication that “mutuality based commercial providers can claim a legitimate right to use risk assessment as an underwriting tool” (Mitra, 2007:352).

The fairness of actuarial equity

In Konow’s (2003) analysis of justice theories, the category concerned with *Equity and Desert* includes the justice theories that share the common denominator of “the presumed dependence of fair allocations on individual actions” (Konow, 2003:1206). These theories inspire the *Equity Principle*,

²⁹ See also the discussion in Section 5.1.

³⁰ See Section 2.7 regarding life insurance as a social good.

³¹ See Section 2.9 for a description and Section 5.3 for an appeal for national funeral insurance scheme.

which calls for proportionality and individual responsibility. Konow (2003:1214) states that a “fair transaction is one that produces... a fair distribution of the surplus in proportion to each person’s ... input to the transaction”. Private life insurance, based on the mutuality approach, clearly subscribes to the equity principle of justice, since all members pay contributions in proportion to their own level of risk.

Referring to life insurance in Europe, Liukko (2010:458) states that “traditionally it has been widely accepted that private insurers are legitimately allowed to ... discriminate between applicants according to specifically statistically relevant factors, particularly age, sex and health”. He considers the conventional arguments provided by the insurance industry for the justification of discrimination in private insurance. Mutuality is based on the two basic principles of *risk pooling* and *equity*: firstly, the pooling of risk in broad population groups to share the responsibility of providing benefits, and secondly, the equitable sharing of the costs, so that the contribution of each individual reflects his known level of risk. Mutuality is therefore fully compatible with concept of equity based on *actuarial equity* or *actuarial fairness*. This justification for discrimination reflects strong industrial logic, where the actuarially equitable risk classification is seen as “the most efficient and fairest way to promote the common good of the insurance pool” (Liukko, 2010:461).

Liukko (2010:463) concludes that “risk classification is deemed such a vital requirement for the sustainable working of private insurance that it is an acceptable reason for discrimination, even ... where [it] ... may be prohibited in other spheres of economic life.” He argues that “the explicit industrial justification (actuarial relevance, theory of adverse selection, solvency) and ... implicit market justification (freedom of contract, symmetry of information, competition)” overrides the civic logic that promotes non-discrimination. Liukko’s (2010) justification of risk classification supports the generally accepted view that “life insurance is inherently a ‘discriminatory’ product” (Liukko, 2010:462).

To ground the justification in terms of a contractualist principle that no one can reasonably object to, I define the following principle, which can be called the Fair Lottery Principle:

The Fair Lottery Principle

In a lottery where each ticket sold has an equal chance to be drawn to win the prize, it would be wrong to charge different participants a different price for the tickets – all tickets should cost the same.

There can be no reasonable ground for objection to this principle, particularly if participation in the lottery is voluntary, if participants have a free choice of how many tickets they want to buy, and if

the price of a ticket and the prize of the lottery is not insignificant. This principle can be used to explain the industrial logic of actuarial equity in simple lottery terms: If the statistical expectation of death of insured A is twice that of insured B, then A effectively holds the equivalent of two lottery tickets versus the one lottery ticket of B. The Fair Lottery Principle requires that person A should therefore pay for two tickets, i.e. double the amount paid by B for his one ticket, since he stands double the chance to win the prize (claim the death benefit). In life insurance terms this is equivalent to stating that it would be wrong in principle not to discriminate in premium rates based on different risk levels of participants. This is the industrial logic essence of the principle of *actuarial equity or fairness*.

The Fair Lottery Principle effectively justifies the principle of actuarial equity as fair. An actuarially equitable risk classification, which will ensure that the contribution of every participant in the pool reflects their expected level of risk, is the fairest and most effective method to achieve the common good of the insurance pool to the benefit of both the insured and the insurer.

The Fair Lottery Principle can also demonstrate the market logic of the necessity of discrimination (as considered in Section 4.4), in simple lottery terms. If a small number of people (group A) could get two tickets for the same price as what all the other people (group B) pay for one ticket, and every person can buy as many tickets as they want, then people in group A will be more inclined to buy tickets and people in group B would be less willing to participate. People in group A would be adversely selecting against the lottery and the resultant withdrawal of those in group B would threaten the sustainability of the lottery.

The problem of the expected mortality risk of each participant

In the Fair Lottery analogy each ticket has an equal chance to win and the chance of every participant winning can be accurately determined by counting the number of tickets they each hold. The Fair Lottery Principle therefore implicitly assumes that the expected mortality risk of each participant can be determined accurately, so that a fully equitable risk classification is possible. In risk discrimination in life insurance, however, the risk level of each participant cannot be determined so accurately. Actuarial risk assessment is not an exact science and the risk that each person brings to the insurance pool cannot be quantified with accuracy. In a report to ASSA entitled “Fair Discrimination”,³² Kruger, Jurisich, Kamionsky and Van Zyl (2004) consider the fairness of the general underwriting factors of age, sex, smoker status and socio-economic class. They state that there is sufficient statistical

³² The Fair Discrimination Subcommittee of ASSA drafted this report on the potential reputational risks for the actuarial profession in South Africa relating to underwriting practices.

evidence to prove mortality differences related to each of these factors, which would make rate discrimination appropriate. However, since it is often not possible to quantify the differences accurately, it would be “difficult to justify current rate differentials based on the currently available statistical evidence” (Kruger, et al., 2004:5).

In the actuarial approach of stratified risk pooling, the insured population is grouped into reasonably homogeneous risk groups which are defined in terms of a number of underwriting factors, to minimise the level of cross-subsidising.³³ The mortality risk of each group is then calculated from the statistical evidence. In terms of the Fair Lottery analogy, it is not possible to count exactly how many tickets each participant holds, and a statistical analysis could at best group the lottery participants into broad categories, each with approximately the same number of tickets.

The risk level of each participant depends on many risk factors, of which the insurance industry selects only the most significant factors, which allows a reasonable approximation to be made of the individual risk of each participant, as basis for premium discrimination. The more significant the effect of any inherent population feature is on the mortality risk, the greater the requirement imposed by the principle of actuarial fairness would be for its inclusion as an underwriting factor. Ignoring a significant risk factor in underwriting, would result in an unfair subsidising of the higher risk participants by the lower risk participants, and could result in adverse selection adversely affecting profitability.³⁴ The same significant underwriting factors are therefore likely to be used by all insurers operating in the same industry.

Questioning the grounds on which discrimination between applicants for private insurance would be acceptable, and how certain types of discrimination can be justified as fair or unfair, has become more common. In drafting guidelines for medical examinations in private insurance in 2000, the Council of Europe’s Committee of Experts expressed the view that “an insurance company’s right to collect information on the person applying for insurance no longer goes undebated”. In the public debate around the issue of restricting genetic underwriting, the freedom of insurance companies to underwrite and the traditional justification for the necessity of risk classification, are now being questioned more readily than before (Liukko, 2010:463). It is, however, not the general *principle* of discrimination in underwriting that is being questioned, but rather the justification and application of the specific *underwriting factors*.

³³ This stratifying is discussed in detail in Section 4.5.

³⁴ As discussed in detail in Section 4.4.

4.6. STRATIFICATION OF THE INSURED POPULATION INTO HOMOGENEOUS RISK GROUPS

If the general principle of risk discrimination is accepted as fair and justifiable, then it is a logical necessity that at least one of the underwriting factors must also be justifiable. The obvious candidate for this position is the original and most significant underwriting factor of *age*. National constitutions and international conventions on human rights typically prohibit unequal treatment of people based on factors such as age, gender, race, ethnic origin, religion, sexual orientation and disability. Despite these prohibitions, the strong statistical evidence of risk differences related to age has been generally accepted worldwide as sufficient justification for premium discrimination in life insurance. As previously argued, in terms of the Boltanski and Thevenot (1999) framework, this justification is based on the industrial logic of actuarial equity. Age is the most significant underwriting factor and commercial private insurance could not exist without age discrimination.

Stratification by underwriting factors

Age discrimination is the primary step towards actuarial equity in underwriting. However, within each age group there are still substantial differences in expected mortality related to features other than age. For instance, in the age group consisting of all 40-year-old people, the risk of the female participants is on average similar to the risk of a group of 30-year-old males. A further subdivision of each age group, based on other significant risk factors, brings life underwriting closer to the ideal implicit in the Fair Lottery Principle, namely that of an accurate assessment of the risk related to each individual participant. Underwriting discrimination based on additional factors therefore improves the level of actuarial equity and thereby the fairness of the underwriting, provided that the application of each of the additional underwriting factors can be justified as fair.

For practical reasons, insurers do not discriminate according to all risk underwriting factors (in addition to age) that can be correlated with mortality, so they tend to select those that are most significant. As a result of demographic, competitive and legal differences between countries, the selection of underwriting factors can differ between the insurance industries of different countries. Liukko (2010) states that in terms of actuarial equity, “any risk factor is unambiguously considered a fair classification criterion ... if it is sufficiently statistically predictive” (Liukko, 2010:461).

The initial stratification in underwriting was only in terms of age at inception, subdividing the population into 60 age groups (from 15 to 75) and this remained unchanged for many years. The general underwriting factors currently used in South Africa are age, sex, smoking status and socio-

economic class.³⁵ In terms of these four factors the insured population is typically stratified into 960 standard rate groups, when the 60 age groups are subdivided by sex (two categories), smoking status (two categories) and socio-economic class (typically four³⁶ categories).

Historic development of stratification

Up to the 1950s, age was the only underwriting factor used in South Africa, before additional rating factors were slowly introduced in the second half of the last century. Wilkie (1997:1040) succinctly explains the arduous process of introducing a new rating factor: “first, suspicion of the relevance of a rating factor is raised, preliminary investigations are carried out, social changes allow insurance companies to introduce relevant questions, commercial pressure leads insurance companies to discriminate and, finally, substantive evidence, which justifies the discrimination is produced”. The consequence of the substantive evidence is typically that the conservative extent of the initial discrimination, which was only based on preliminary investigations, can be increased substantially, to reflect the statistically proven difference in mortality of the relevant factor more accurately – thus improving actuarial equity.

By the 1960s, a very conservative age deduction of three years for female applicants³⁷ was in use. This was subsequently increased to five years by 1980 and later to seven years by 2000. Each step was an improvement towards better actuarial equity, but even the five-year age deduction could still be considered unfair since it did not reflect the full extent that female mortality was lower than male mortality. The first separate assured life mortality table for females in the UK was only produced in 1980, based on the 1975–1978 mortality experience (Wilkie, 1997:1040).

In the late 1970s, the first tentative step was taken towards a combination of socio-economic and smoking-status underwriting, by introducing “preferential rates” in addition to “normal rates”. Preferential rates³⁸ were about 25% lower than normal premium rates and required the applicant to have a four-year tertiary qualification, or a three-year qualification plus an income of R2 300 per month, or to be a non-smoker. By 1990 this stratification was extended to a four-tier system of “basic rates”, “normal rates”, “preferential rates” and “super rates”. Basic rates applied only to low income applicants with matric or a lower education, who qualified only for a limited range of funeral and endowment policies. Super rates required a minimum premium of at least R100 per month, in addition

³⁵ Discussed in more detail in Section 2.10.

³⁶ Some companies use five socio-economic categories, which would stratify the population into 1200 rate groups.

³⁷ Initially only white females qualified for this deduction!

³⁸ This is a typical example, as used by one leading SA insurer.

to the existing education and income requirements of preferential rates. Super rates were about 50% lower than normal rates and preferential rates were about 30% lower.

The insurance industry in South Africa was one of the first to introduce socio-economic discrimination. Commenting on UK developments, Wilkie (1997:1041) describes what he calls “the recently seen ... introduction of ‘preferred lives’ premiums”, in which insurance companies use “a number of rating factors, besides age and sex, to assess the premium; they may include occupation, social class, locality and some medical factors”. He states that such companies “may be basing their premiums more on judgement and small-scale statistical surveys than on comprehensive and reliable statistics”. He considers that as natural, since insurance companies “cannot carry out a mortality investigation unless they have the data; they won’t get the data unless they ask for it; and there is no point in asking for it unless it is being used to assess the premium in the first place”.

It was only after 1990 that separate rates for smokers and non-smokers were introduced across all the socio-economic classes described above, with non-smoker rates initially about 30% lower than smoker rates. According to Wilkie (1997:1040), life insurers in the UK did not start discriminating between smokers and non-smokers until about 1980.

Limit to stratification

The greater the number of risk factors considered in the underwriting process, the greater would be the number of standard risk groups and the greater should be the homogeneity within each risk group, and the smaller would be the cross-subsidising between participants. There is obviously a practical limit to the extent that it would be meaningful and cost-effective to reduce the level of cross-subsidising, but there is also a conceptual limit. If it were possible to increase risk classification infinitely by defining finer and finer subgroups of risk, then ultimately there will be little pooling of risk, which would defeat the original purpose of insurance.

4.7. JUSTIFICATION OF SPECIFIC DISCRIMINATION FACTORS

It was argued in Section 4.6 that accepting the justification of age as the primary underwriting factor is implicit in the justification of the principle of discrimination by the Fair Lottery Principle. The task at hand is to consider the justification of each underwriting factor additional to age, namely sex, smoking status and socio-economic class.

It was argued that adding each additional underwriting factor improved the risk homogeneity of each stratified grouping, coming closer to the ideal of actuarial equity. Kruger, et al. (2004:6) state that if a risk factor “only marginally affects the claim incidence, [or] the proportion of applicants with the

factor is relatively low”, discrimination based on that factor may not be necessary and the low risk group may be “willing to subsidise the higher risk group”. Where significant statistical differences in risk based on an additional risk factor is found, actuarial equity would indicate that it should be accounted for in underwriting. This does not, however, ensure that such stratification is fair. Consider a hypothetical case of a specific race group in which heavy smoking is a dominant cultural feature. Differentiation based on race would show a higher mortality experience for this race group, unrelated to any genetic differences. It would, however, be unfair to the non-smokers in this race to be rated as higher risks, while the smokers in another race group, with a lower mortality experience since smoking is not prevalent in that race group, are treated as lower risk.

It is therefore necessary to find justifiable fairness criteria with which each additional risk factor can be evaluated.

Some suggested fairness criteria

In their “Fair Discrimination” report to ASSA, Kruger, et al. (2004:5) suggest a number of criteria for “assessing the appropriateness and necessity for using a particular underwriting factor”. Their concern was more related to the reputational risk for the actuarial profession than to the fairness of the underwriting, but since their arguments can be regarded as representing the views of the actuarial profession, they do merit some attention.

Responsibility and influence: Kruger, et al. (2004:6) suggest that an underwriting factor is more likely to be considered fair if people are partly responsible for and have influence over the factor (like smoking). However, people cannot be held responsible and have no influence over the most prominent underwriting factor, namely age, which is generally accepted by all as a fair underwriting factor. Responsibility by an applicant for a factor is therefore not a useful criterion by which to judge its fairness.

Awareness: Kruger, et al. (2004) also suggest that it may be considered unfair to take cognisance in underwriting of a condition of which an applicant was unaware, because the person could then not wilfully select against the insurer. This, however, is not a convincing argument: if an insurer was imposing a medical loading on one applicant with an existing heart condition while the applicant was aware of the heart condition, it would be unfair to ignore the additional risk of another applicant, just because this applicant was unaware of a similar condition (until it was revealed in the underwriting process). The medical loading is for the medical condition, not for the awareness of the condition. Awareness of a condition cannot be justified in the consideration of its fairness as an underwriting factor.

Alternative risk rating factor: Kruger, et al. (2004) suggest that a factor “may be considered inappropriate when alternative risk rating factors exist that are more acceptable” (Kruger, et al., 2004:6). Clearly it would be unwise of the insurance industry to use a questionable rating factor if a more acceptable one is available. The unavailability of an alternative risk rating factor may be used as justification for the market necessity of a significant risk factor, but that does not provide any reasonable argument for the fairness of that factor (as discussed in Section 4.4).

Acceptability and public opinion: Kruger, et al. (2004) refer to the use of risk factors that may be “considered inappropriate by society” (Kruger, et al., 2004:7) and warn about the reputational danger if the actuarial profession cannot defend such factors with “both statistical evidence and moral justification”. Their comment correctly implies that there is no necessary link between what society may consider inappropriate and what is morally justifiable. They mention the historic use of race as an underwriting factor by some companies, which is now considered totally unacceptable by everybody. Similarly, the more recent banning of sex as underwriting factor in the European Union³⁹ is an example of changing acceptability and public opinion – the result of civic logic with its common principle of collective interest leading to equality, rather than industrial logic with its principle of efficiency leading to actuarial equity (Liukko, 2010:460).

Most of the above criteria do not provide an acceptable measure for the fairness of the discrimination based on risk factors, but seem to be more concerned with appearances, opinion, acceptability and the reputation of the actuarial profession.

The Fair Discrimination Principle

To ground the justification of the fairness of the discrimination of each specific underwriting factor on contractualist principles one would need to find a principle of fairness to which no one can reasonably object. For this purpose, I define the following principle:

The Fair Discrimination Principle

In terms of its contribution to actuarial equity, a specific underwriting factor for premium discrimination between insurance applicants is justifiable and fair, if it meets the following criteria:

- The statistical evidence to support the discrimination must be strong and reliable
- The allocation of each applicant to a risk group must be unambiguous

³⁹ See also the discussion in Section 5.1

- The effect of the factor on mortality must have a reasonable causal explanation.

The formulation “in terms of its contribution to actuarial equity” builds on an acceptance of the fairness of the general principle of discrimination, as argued in terms of the Fair Lottery Principle.

This formulation of the Principle implies that the stated criteria are *necessary and sufficient* conditions for fairness. It would be difficult to object to each of the three criteria on their own as *necessary* condition for actuarial fairness on any reasonable basis: if the statistical evidence to support the discrimination is weak or unreliable then the contribution of that underwriting factor towards actuarial equity would be questionable; if the allocation of applicants to a risk group is ambiguous then applicants negatively affected would have reason to object; if there is significant correlation but not a reasonable causal explanation for the effect of the underwriting factor on mortality then it may be a case of an indirect causation, where a spurious relationship is confused for causation. Not one of the criteria on its own is a *sufficient* condition for fairness but taken in conjunction they may well be considered as sufficient. It would be difficult to object to the contribution to actuarial fairness of an underwriting factor that meets all three criteria.

In the following section, the applicability of each of the three criteria of the Fair Discrimination Principle is first tested on the underwriting factor of age (already accepted as fair), and then the underwriting factors of sex, smoking and social-economic class are measured up against the criteria.

(a) Strength and reliability of statistical evidence

To be reliable, a statistical analysis must be based on sufficient data, and the statistical evidence is strong if it shows significant differences in the values investigated. Mortality investigations for insured lives in South Africa are carried out by the Continuous Statistical Investigation (CSI) Committee of ASSA every five to ten years, based on annual statistics provided by all the large insurance companies. The latest investigation⁴⁰ was done for the four-year period 1999 to 2002 and it was based on 15.3 million policy years and 86000 deaths in total. Based on these continuous mortality investigations, ASSA produces a new set of Standard Mortality Tables for the life insurance industry from time to time. This is normally done when considered necessary to reflect demographic trends in mortality rates. Each subsequent investigation for a new four-year period builds on all previous investigations. Comparisons with previous results indicate the development of trends and strengthens the statistical reliability of the published mortality tables.

⁴⁰ The mortality comparisons in this Section 4.7 were obtained from the *CSI Assured Lives 1999-2002 Report* and are available at www.actuarialsociety.org.za.

Age as underwriting factor subdivides the total insurable population into 70 age groups, between the underwriting age limits of 15 and 85. While the bulk of the data is at the mid-range of ages, even the extreme age group of 85 included about 50 000 policy years for the period 1999 to 2002. The increase in mortality from age to age is significant and the evidence for this is strong. The extensive volume of data on which the actuarial mortality tables are based, and the regular repetition of the statistical analysis on new data, ensure that the statistical evidence for the expected mortality risk for all ages is very reliable.

Sex subdivides the total population into only two groups. Of the total exposure 63% was male and 37% was female (which had increased from 34% from the investigation 4 years earlier). The analysis was therefore based on 9,6 million policy years for males and 5,7 million policy years for females, which is sufficient data to ensure reliability. Female mortality is between 30% and 40% lower than male mortality at most ages, which is strong evidence to support a significant premium discrimination in favour of females. Kruger, et al. (2004) concur that “the [actuarial] profession can defend the use of the rating factor with adequate statistical evidence” (Kruger, et al., 2004:10).

Smoking status is similarly accounted for by a simple binary distinction between smokers and non-smokers. About 29% of males and 14% of females are classified as smokers, and smoker mortality is about 50% higher than that of non-smokers up to age 45, and about 80% higher after age 45. This is strong and reliable evidence for premium discrimination.

Socio-economic class is accounted for in the CSI report by a subdivision into four rating groups (best, 2nd best, 3rd best, worst). Insurers use a variety of methods (mostly in terms of education and income levels) to define their own socio-economic classes, and the CSI committee has to use their judgement to allocate the data from the insurers’ classification into the four classes used in the CSI analysis. Almost half of the total data was ignored in this analysis as ‘unspecified’ so that less data was used than for the analysis of sex and smoking mortality. The evidence of the differences in mortality between the socio-economic classes, however, is very strong – the mortality of the 2nd best class is about 50% higher, the 3rd best class is about 100% higher and the worst class is roughly 400% higher than the mortality of the best class. Kruger, et al. (2004) comment that “there is statistical evidence of a significant correlation between socio-economic status and mortality” (Kruger, et al., 2004:11). They also refer to studies “that separately show the correlation between education and mortality as well as income and mortality”.

(b) Unambiguity of allocation

For an underwriting factor to be considered statistically reliable, it is necessary that the allocation of individuals into the different groups indicated by the factor should be reliable and unambiguous – the discrimination should be “according to ... objectively determinable criteria” (Kruger, et al., 2004:5).

Age as an underwriting factor meets this criterion: the age of an applicant at inception of a policy, which determines the premium rate for the full term of the policy, can be determined with accuracy from an identity document.

Sex as underwriting factor is uniquely determinable and subdivides the total population into the two groups of male and female. The complication of gender or sexual orientation (the Lesbian, Gay, Bisexual, Transgender or LGBT issue) is ignored – it involves a relatively small part of the population (less than 2% are gay or lesbian by reasonable estimates) and there is no commercial incentive for the industry to consider underwriting discrimination based on sexual orientation. Such discrimination would most likely indicate higher premium rates for LGBT members and no social pressure to introduce such discrimination exists or can be expected.

Smoking status is similarly accounted for in underwriting by a binary distinction between smokers and non-smokers, but the allocation is not so uniquely determinable as for age and sex. The discrimination is based on a declaration of smoking status by the applicant and insurers must therefore rely on the principle of *uberrima fides*⁴¹ for reliable underwriting. A cotinine test⁴² may be required to test the integrity of purported non-smokers. Because smoking status can change and can differ significantly in intensity and historic duration, the simple binary distinction applied between smokers and non-smokers may not necessarily reflect the underlying smoking risk per individual accurately. No cognisance is taken of the extent of any history of smoking – a smoker who recently quit smoking is treated as a non-smoker after passing a cotinine test. Most insurers allow an existing policyholder who was rated as a smoker to request a premium reduction after quitting smoking. A brief attempt by a South African insurer to differentiate between light and heavy smokers, was abandoned some years ago as impractical. While smoker status is less precisely determinable than age and sex, marketing pressure typically lets insurers err on the lenient side in their treatment of smokers. The implicit assumption is that there will be some level of cross-subsidy of smokers within the non-smoker insured pool.

⁴¹ See Section 2.6.

⁴² Cotinine is the predominant metabolite of nicotine and remains detectable in urine for some weeks after smoking.

Allocation to a risk group based on **socio-economic class** is more problematic, since there is no generally accepted, objectively determinable and value-free definition of socio-economic classes (unlike for age, sex and smoking status). The allocation to different socio-economic classes is typically based on a combination of increasing education and income levels, with rather arbitrary definition of the borders between classes. Kruger, et al. (2004) comment that “the way socio-economic statuses are defined for rating purposes is necessarily, to a degree, subjective” (Kruger, et al., 2004:11). The definitions used by different insurers are not the same and do not remain static: the nominal income levels in the definitions must be adjusted every few years, to counter the effect of inflation on the real values of income. The definition of four socio-economic classes used by a large insurance company in South Africa provided in Section 2.10 (c) is presented in a considerably simplified way. The full definition is much more extensive and requires a 6 x 7 matrix. For example, to qualify for Class 4, an applicant must have either an income of at least R40 000 per month; or matric plus an income of R30 000 per month; or a three-year diploma plus R22 500 per month; or a three-year degree plus R14 000 per month, or a four-year degree (with no income requirement).

The arbitrariness of the income and education levels is most visible at each income cut-off level. The problem is accentuated by the substantial difference in premium rates between one class and the next. The premium for a young male applicant in Class 4 is about 50% less than in Class 3. This means that an applicant with a three-year diploma and an income of just over R22 500 who qualifies for Class 4, will get about 50% more life cover than a similar applicant with an income of just below R22 500, who falls into Class 3. Compared to age discrimination (with its unquestionable definition of age and its small incremental change in premiums from age to age), the more arbitrary definition of socio-economic classes, with a large effect on premiums, can reasonably be objected to by some as unfair discrimination.

(c) Necessity of a causal explanation

Kruger, et al. (2004:5) argue that, in addition to adequate statistical correlation, there should be an acceptable causal explanation for the impact of a risk factor on the mortality experience, to be able to justify its use in underwriting. Scientific evidence is often based on statistical correlation of variables, but correlation cannot provide proof of a causal relationship. In science, correlation may often be useful for prediction, despite failing to prove evidence of causation. In insurance underwriting, however, if no reasonable causal explanation can be provided for the effect of a potential risk factor, it would be difficult to justifiably use the factor.

In practical terms, insurers would not stumble over a new underwriting factor with a significant impact on mortality, without some strong causal explanation to expect such an impact.

Age: There can be little dispute about the correlation between aging and the risk of dying. A simple causal explanation is that as people age, they become more likely to succumb to diseases and there are more diseases common to older ages. According to the US Centre for Disease Control,⁴³ “about 88% of adults over age 65 have one chronic condition, and 50% have at least two”, of which hypertension, heart disease and diabetes are among the most common. As people age, the ability of their cells to fend off disease and to heal reduces.⁴⁴ Older people therefore often die from injuries or diseases that younger people would normally survive.

Sex: It is likely that the cause for the mortality difference is not only biological but also dependent on social factors. This is evident from the fact that female mortality worldwide is lower, but the extent of the advantage varies between societies.

The genetic female mortality advantage is clear from birth:⁴⁵ during the first year of life male mortality is about 25% higher than female mortality, where external social factors are identical. Females display “a better resistance to biological aging” and some of the genetic advantage may be hormonal: “oestrogen, for example can facilitate the elimination of bad cholesterol” which reduces the risk of heart disease, while “testosterone, on the other hand, can be linked to violence and risk taking”. Kruger, et al. (2004) refer to “sufficient evidence to argue that there are biological differences between genders and that there is therefore a causal relationship” (Kruger, et al., 2004:9).

Much of excess male mortality is not genetic and can be explained by social factors in the industrial world, like more male exposure to the hazards and stress of the workplace, alcoholism, smoking and road accidents. Female emancipation over the last decades may have reduced this difference and women now participate more equally in the work force. However, the convergence is limited: female professional activities are probably still less harmful to their health, male smokers tend to smoke more than female smokers, and men tend to drive more recklessly than females.

⁴³ <https://www.everydayhealth.com/senior-health/do-people-really-die-of-old-age.aspx>.

⁴⁴ <https://www.livescience.com/32241-do-people-really-die-of-old-age.html>.

⁴⁵ <https://www.scientificamerican.com/article/why-is-life-expectancy-lo/>.

Women are probably also more inclined to take care of their bodies and tend to engage in fewer behaviours that are bad for health. They may thus benefit more from medical and social advances by practising activities that are healthier.

Smoking: While it is difficult to provide hard proof of the causal explanation for lower female mortality, this is not the case for the higher smoker mortality. Smoking has been proven to be the most important preventable cause of death by numerous scientific studies. The likelihood of smokers to suffer a heart attack is six times more than for non-smokers and ischemic heart disease represented a large and common cause of death for smokers.

Diseases⁴⁶ such as lung cancer, chronic lung disease, coronary artery disease and stroke have been clearly linked to smoking. Lung cancer is the most prominent of all cancer deaths and smoking is the cause of more than 80% of lung cancer deaths. Smoking increases the risk of many other types of cancer, including cancers of the throat, mouth, stomach, pancreas, kidney, bladder, and cervix.

Socio-economic class: In the introduction to the thesis, the risk is mentioned that socio-economic underwriting may be viewed as a proxy for racial discrimination. Woolf, Aron, Dubay, Simon, Zimmerman, et al. (2015:4) state that, although other ethnic groups experience a higher rate of disease than whites in the United States of America (USA), these are “dwarfed by the disparities identified between high- and low-income populations within each racial / ethnic group.” This indicates that income differences can provide a strong causal explanation for racial differences in mortality. This, however, still begs the question of a reasonable causal explanation for the effect of income differences on mortality.

There are many research studies that show how *education levels* influence mortality. Zimmerman, Woolf and Haley (2015) argue that the benefit of education lead people to better health outcomes. This includes better choices about lifestyle and health behaviours, such as healthy diets, regular exercise, response to stress, reaction to illness and awareness of health care. Those with higher levels of education are less likely to engage in risky behaviours, such as smoking and drinking.

There is obviously also a strong correlation between education and *income levels* and many of the above benefits stem from better economic circumstances. Many research studies show a strong correlation between income and the likelihood of disease and premature death. The researchers argue that this is caused by the fact that wealthier people can afford better medical care and a healthy lifestyle. They tend to have stable jobs that provide good benefits, health insurance, and worksite

⁴⁶ <https://www.medicalnewstoday.com/articles/261091.php>.

wellness programmes, and have fewer occupational hazards. They can more easily afford nutritious meals and regular exercise.

On the other hand, Woolf, et al. (2015:4) argue that “people with low incomes tend to have more restricted access to medical care” and are less likely to receive preventative health services. Their diets tend to be less nutritious, high-carbohydrate options and fast foods. Their difficult living circumstances often prevent them from exercising regularly, and they may “have difficulty to obtaining assistance with smoking cessation or with alcohol and drug dependence”.

It seems to be a credible causal explanation that a combination of income and wealth directly supports better health and thus lower mortality. Kruger, et al. (2004) concur that there is “an understandable causal relationship between socio-economic status and mortality” (Kruger, et al., 2004:11).

4.8. EVALUATING THE MERITS OF SOCIO-ECONOMIC UNDERWRITING

Measured against the criteria of the Fair Discrimination Principle, the rating factors of age, sex and smoking can be considered justifiable and fair in terms of their contribution to actuarial equity. They meet the criteria of strong and reliable statistical evidence, unambiguous allocation and reasonable causal explanation.

In the case of socio-economic underwriting, the *statistical evidence* of significant differences in mortality experience is strong, compared to that of sex and smoking status. The mortality difference between the 2nd best socio-economic class and the best class (about 50% higher mortality) is about the same as the male to female difference, while the mortality difference between the 3rd best socio-economic class and the best class (about 100% higher mortality) is higher than the smoker to non-smoker difference. The mortality of the worst socio-economic class, however, is about 400% more than that of the best class, which is much more significant than any other underwriting factor. Ignoring such a significant difference in mortality between identifiable groups of participants in the insured life pool would undermine the process of stratification into more homogeneous groups and the resulting improvement in the actuarial equity (as discussed in Section 4.6).

It seems that there is also a credible *causal explanation* for the relationship between socio-economic class and mortality. The causal explanation is not as strong as the overwhelming medical evidence that exists for smoking as a risk factor, but it seems to be stronger than the case for sex as a risk factor, where the causal explanation is a mixture of possible genetic differences and social difference between sexes.

The shortcoming of socio-economic discrimination in underwriting is that it does not meet the second criterion of the Fair Discrimination Principle, namely that of an *unambiguous allocation* to different classes. The education and income cut-off levels differ from company to company and the income levels must be regularly adjusted by each company. The strong statistical evidence of mortality differences in the CSI reports is (somewhat) compromised by the approximations required to combine disparate industry data. The problem is not limited to the process of group borders – even for the applicant the defining properties are not fixed over time. Unlike for the features of age, sex and smoking status at inception, the income of the applicant is not necessarily stable over time, particularly for those not earning a fixed salary.

The ambiguity of the cut-off levels does not affect most applicants, who tend to fall sufficiently far away of the borders of each socio-economic class. It does, however, affect those applicants near the borders, and the effect can be substantial. In the example provided in Section 4.7, it is difficult to justify a 50% difference in cover for an applicant hitting or missing an arbitrary income target like R22 500, as required by one insurer.

In a utilitarian evaluation of fairness, the plight of those near the border of a socio-economic class would not present a problem, since it would be the aggregate benefit of all that is to be maximised. Amongst the relatively small group affected by the cut-off levels, the pleasure of those falling on the lighter mortality side of the fence could largely balance out the pain of those falling on the heavier mortality side. For most participants, the better actuarial equity resulting from socio-economic discrimination, would outweigh the objections that a small group may have about the personal negative effect of the ambiguous classification.

A central feature of contractualism, however, (strongly distinguishing it from the aggregation of individual complaints allowed by utilitarianism) is its insistence that the only reasons for or against a principle are “various individuals’ reasons for objecting to that principle” (Scanlon, 1998:229). Therefore, in this contractualist evaluation of the justification for discrimination in underwriting practices of the life insurance industry, the objection of the individual against an ambiguous classification affecting him or her personally, must be considered. Socio-economic discrimination therefore does not meet all the criteria required by the Fair Discrimination Principle to be considered fair in terms of its contribution to actuarial equity.

4.9. INDIVIDUAL HEALTH UNDERWRITING

The discrimination based on the general underwriting factors of age, sex, smoking status and socio-economic class was the focus of this study and has been dealt with in detail in this thesis. These

factors are used to determine the standard premium rates for healthy applicants. A medical questionnaire must be completed by all applicants to determine their health, and in some cases a full medical examination may be required.

Unhealthy applicants with a specific medical impairment can receive an individual underwriting adjustment⁴⁷ on top of the standard premium rate, or the application may be declined if the additional risk is too high. These individual adjustments affect less than 10% of applicants. For the sake of completeness, the justification for discrimination based on medical impairment can also be considered against the criteria of the Fair Discrimination Principle.

Discrimination based on specific medical impairment clearly meets the criterion of causal explanation, as well as the criterion of unambiguous classification. The problem, however, is with the criterion of statistical reliability. The statistical evidence for the general rate discrimination is based on the very large amount of data of the total insured population in the industry. However, because of the scarcity of data for health impairments, Brackenridge (1977:29) states that “the amount of extra premium which should be paid by a substandard risk is much more difficult to determine”. The only way to estimate the extra mortality related to an impairment is “to study large groups of persons each having similar impairments, over a long period of years” (Brackenridge, 1977:29). The same argument would hold true to a much larger extent for any attempt at genetic underwriting. While the statistical evidence of *some* level of higher mortality for lives with some medically impairment or genetic risk can be strong, an accurate quantification of the extra risk of each specific impairment or genetic risk is much more subjective. The determination of medical loadings must substantially rely on professional medical opinion in addition to often limited statistical evidence. In the case of genetic risk, the amount of available statistical evidence is totally inadequate for any reliable actuarial quantification of the extra risk. This situation is unlikely to change because there is no economic or competitive incentive for the insurance industry to gather such evidence.

The fairness of medical loadings currently being used can therefore not be justified by the Fair Discrimination Principle. Similarly, the use of genetic information in underwriting (which is currently very unlikely) will certainly not be justifiable by the Fair Discrimination Principle. A consideration of the individual discrimination based on occupation and risky part-time activities results in a similar conclusion.

⁴⁷ See Section 2.11.

CHAPTER 5

CONCLUDING REMARKS

5.1. LITTLE CHANCE FOR NATURAL CHANGE

Without some dramatic external disruption, any change in the underwriting practice in South Africa is unlikely. The use of the four dominant underwriting factors of age, sex, smoking status and socio-economic class is thoroughly entrenched in the insurance industry. Relative to the situation before the 1960s, the improved actuarial equity derived from the increased homogeneity in the stratification of the insurance pool is unquestionable (i.e. strong justification based on industrial logic). With the severe competition within the insurance industry, no single insurer could survive the adverse selection that would result from less competitive rates based on blunter underwriting (i.e. strong justification based on market logic). The life insurance industry is highly respected as an important part of the South African economy⁴⁸ and the acceptability of its underwriting practices has never been seriously questioned (i.e. currently little threat based on the civic logic of collective interest and equality). The concerns raised 14 years ago by Kruger, et al. (2004) on the potential reputational risk for the actuarial profession related to discrimination in underwriting practices, has not yet materialised.

The only possible threat to the status quo would be a legally enforced change by the regulating authorities, such as occurred in the European Union in respect of sex discrimination in underwriting. Before 2011, sex-specific premium differentiation was the norm in the European Union, not only for life insurance, but also for motor, annuity and health insurance. However, in 2004, the EU Council issued the so-called ‘Gender Directive’ to ensure the principle of equal treatment between men and women. Ironically, since sex as an underwriting factor means lower premium rates for females, it cannot be considered as unfair sexual discrimination against women (which is the traditional nature of sexual discrimination). However, the Directive stated that sex-based differences in actuarial calculations of insurance premiums must be considered as sex discrimination, since “sex is not the dominant factor in determining life expectancy”. Despite this statement, the Directive allowed an exception for insurance companies “if they could provide actuarial and statistical data to verify sex as an objective risk underwriting factor” (Schmeister, Stromer & Wagner, 2012:3). Since it could be actuarially justified, sex discrimination in premiums continued, until the European Court of Justice ruled in 2011 that the exception in the Directive was “incompatible with the principle of non-discrimination”. From 2012, any sex-based discrimination in insurance premiums is prohibited in the

⁴⁸ See the reference by Munro and Snyman (1995) in Section 1.3.

European Union (Schmeister, et al., 2012:3). So even though the industrial logic of actuarial equity provided strong justification for sexual discrimination in favour of females, the civic logic underlying the Gender Directive won the day and prescribed the principle of equal treatment between sexes.

5.2. A POSSIBLE ALTERNATIVE TO SOCIO-ECONOMIC UNDERWRITING

In the unlikely event that a regulatory prohibition against socio-economic underwriting should become a reality, it would be difficult for the insurance industry to find an alternative underwriting factor that would achieve a similar risk differentiation as the current socio-economic discrimination. The causal explanation for the lower mortality of higher socio-economic classes (or vice versa) is strongly based on the effect of education and income on lifestyle health. Gym membership as an indication of healthy lifestyle is used in the loyalty programmes of some medical schemes, but this is limited to the wealthier section of the population and does not have a wide reach. The correlation between socio-economic class and race was discussed in Section 1.3, but racial underwriting is socially and politically unthinkable. It would in any event lack any causal explanation other than the correlation with socio-economic class. A practical alternative risk measure with the same predictive strength as socio-economic class does not seem to be available.

A possible alternative approach for the industry to address the problem of the wide mortality range of our heterogeneous population, may be via product design rather than underwriting discrimination. It may, for example, be possible to use as higher expected mortality on the first tranche of life cover (say R50 000), with decreasing mortality on subsequent increasing tranches of cover in the same policy. This would ensure that the applicant for only R50 000 life cover would pay at the high mortality rate on the full sum assured, while the applicant with R1 000 000 life cover would pay at the initial high mortality rate on only 5% of the sum assured, with decreasing mortality as the sum assured increases. Such an approach is unlikely to achieve the same level of actuarial equity as the current socio-economic underwriting but would help reduce the cross-subsidising between socio-economic classes, with an increased level of civic acceptance.

5.3. AN APPEAL FOR A NATIONAL FUNERAL INSURANCE SCHEME

In conclusion, I want to combine some of the discussions and arguments dealt with in this thesis in an appeal to the actuarial profession, the insurance industry and the government, to work together towards the establishment of a compulsory national funeral insurance scheme in South Africa. A serious consideration of the concept of life insurance as a social good (Section 2.3), the state of the private funeral insurance market (Section 2.7), and the justification for no underwriting in social insurance (Section 4.3), should serve as a strong motivation to do so.

Funeral insurance is clearly a primary social good, as a basic level of life insurance “that should be available to all, even to those who do not have the resources to purchase it” and which should be provided by government “for the benefit of the entire society, because they would be under-provided if left to the market forces or private enterprise”. Current private funeral insurance often provides bad value for money due to the problems of high distribution cost, high lapse rates leading to loss of cover, the need for profit margins, instability of small operators, etc.⁴⁹ A compulsory national funeral insurance scheme would solve these problems. The decade-long lack of progress on the proposed National Social Security Fund is largely caused by limited consensus related to retirement provision issues, which has no bearing on funeral insurance. There should be public consensus from all parties about the benefit of a compulsory national funeral scheme, particularly for a scheme funded by the fiscus from tax money. Even a contributory national scheme, which could most likely be run at less than 50% of the cost typically charged by private funeral insurance, should be largely acceptable.

I reiterate the *Insurance Solidarity Principle*, which I used to justify the lack of any underwriting in social insurance:

If a society can afford to, it has a duty to provide a basic minimum amount of life cover for all its citizens on an equal basis. The life cover should cover at least the cost of a basic funeral for the deceased, and possibly also part of the immediate living cost of dependants of the deceased.

This principle is difficult to reject on any reasonable basis and it is a call on the government for action: to provide basic life insurance for all, with no underwriting and no discrimination!

⁴⁹ See Section 2.9 for a discussion of problems with funeral insurance.

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