



# **Strategic response of private healthcare funders in South Africa to global climate change**

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## ABSTRACT

Climate change is an environmental issue that has actual or potential strategic impacts on many companies. The research problem emanates from the scientific work on climate change and the vast health effects that would pose as implications within the healthcare industry. The aim of the research was to explore the strategic response of private healthcare funders in South Africa to global climate change.

By means of a case-study based research design, the stimuli for strategic response, risks and opportunities related to global climate change and strategy and an overall strategic organisational posture under the RDAP continuum scale framework had evolved.

Evidence from the results and analysis brings light to the fact that global climate change as a strategic concern to private healthcare funders remains a point of scepticism. Although some of the organisations from the sample have considered climate change as a strategic concern, there are others that do not.

The study showed that global climate change continues to remain an issue of complexity and uncertainty in the external business environment such that strategy formulation and implementation and acting proactively on the matter remains complicated.

**Keywords:** corporate strategy theory, corporate response models, global climate change, health, private healthcare funders

## DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Signed: \_\_\_\_\_

Dr Roy Aharon Sery

Date: 10 November 2010

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## CHAPTER ONE

### INTRODUCTION TO RESEARCH

#### 1.1 Introduction

Climate change is an international environmental issue that has increasingly attracted business attention because of its actual or potential strategic impact on many companies (Kolk & Pinkse, 2004). Climate change thus poses strategic dilemmas for companies across a range of industries; this stemming from the adoption of the Kyoto Protocol of 1997 as the main driver for corporate strategic change (Kolk & Pinkse, 2004).

*“Climate change and the environment are higher on the minds of consumers around the world than any other socio-political question. Executives across a broad range of sectors have started to recognise that this mindset is a business reality – whether they believe in the science or not”* (Enkvist, Naucclér & Oppenheim, 2008).

#### 1.2 The Research Problem

The research problem emanates from the scientific work on climate change that has accelerated in the past years by collaborations such as the Intergovernmental Panel on Climate Change (IPCC) (Stern, 2006). The evidence that climate change



is set on a worrying path grows stronger despite a small minority who dispute the argument and / or evidence and whose positions are weakened as the evidence accumulates (Stern, 2006).

According to the Intergovernmental Panel on Climate Change (IPCC), the main impacts of climate change are on ecosystems, water resources, food resources, land and health (IPCC, 2007; Costello, Abbas, Allen, Ball, Bell, Bellamy, Friel, Groce, Johnson, Kett, Lee, Levy, Maslin, McCoy, McGuire, Montgomery, Napier, Pagel, Patel, de Oliveira, Redclift, Rees, Rogger, Scott, Stephenson, Twigg, Wolff & Patterson, 2009). This study focuses attention on one of these aspects; that being the health implications of global climate change. As such, it is hypothesised that the healthcare sector would be affected and more specifically, private healthcare funders that insure the lives and health of humans, doing business within this sector, would be impacted by global climate change.

Climate change can affect health through several pathways of which some include: increased frequency and intensity of heat waves, reduction in cold-related deaths, increased floods and droughts, changes in distribution of vector-borne diseases as well as disasters and malnutrition (Haines, Kovats, Campbell-Lendrum & Corvalan, 2006). The World Health Organisation (WHO) finds consensus in the fact that climate change will adversely affect in profound ways the fundamental pre-requisites for health, these being clean air and water, food resources, adequate shelter and freedom of disease, in so far as the negative implications for even achieving the Millenium Development Goals (MDGs) (WHO, 2009).

The eight Millenium Development Goals identified by the United Nations (UN) are outlined in Table 1 below: (UN, 2009)

**Table 1: Millenium Development Goals**

Goal 1: Eradicate extreme poverty and hunger	Goal 5: Improve maternal health
Goal 2: Achieve universal primary education	Goal 6: Combat HIV / AIDS, malaria and other diseases
Goal 3: Promote gender equality and empower women	Goal 7: Ensure environmental sustainability
Goal 4: Reduce child mortality	Goal 8: Develop a global partnership for development

The advent of global climate change is presumed to have a direct impact on MDG Six and MDG Seven while indirectly influencing and attaining the required achievements of the other goals.

The vast health effects of climate change would not merely pose implications on public health systems but also on other constituents within the healthcare industry. The healthcare industry in general is comprised of a public and private sector.

The private sector includes:

- Private health service providers;
- Institutions that represent health professionals;
- Private health facilities;

- The funding mechanisms of private health services example: medical schemes, life and short-term insurance and out-of-pocket payments.

According to Kruger (2009), the medical schemes industry in South Africa has experienced no real growth in coverage in the last two decades with membership stagnating at approximately seven million lives. But the spend within the private healthcare sector has increased significantly, sitting at approximately R60 billion in 2006, resulting in a private healthcare sector which is unaffordable to the majority of the population. The public health sector provides healthcare for the remaining 84% of the population (Kruger, 2009).

In view of contributions to medical schemes being the key source of financing in the private healthcare sector, it is for this reason that the private healthcare funders (insurers) in South Africa were selected as the organisations that would most likely be affected by changes in the external business environment and more specifically would be impacted by global climate change.

Dunn (2002) makes reference to a 2002 report that was commissioned by UNEP on climate change and the financial sector. This report concluded that several factors prevent financial institutions from taking a more proactive stance on the climate change issue. Most importantly is that financial institutions are unaware of the gravity of the issue or that they see no financial connection (Dunn, 2002) which may be translated into risk or increased costs. The role of private healthcare funders is one of which they provide finance or insurance for health and healthcare

and can be considered as an element of the financial, insurance and services sector. The rationale therefore, is that global climate change and its effects on health and healthcare, pose a direct threat and possibly even opportunities to organisations in the healthcare sector.

In the current uncertain policy context after Kyoto, a wide variety of corporate strategic market responses are emerging, which are part of companies' broader strategic positioning that includes both market and non-market components (Kolk & Pinkse, 2005).

### **1.3 Research Purpose / Aim**

The aim of the research is to explore, by means of a case study methodology incorporating semi-structured, in-depth interviews with relevant respondents, as well as reviews of available website reports, the strategic response of private healthcare funders in South Africa to global climate change. An evaluation study of the strategic responses of this sector within the insurance and services industry will generate an understanding of how these organisations perceive the context of global climate change to their business; and assess whether these organisations recognise the potential risks and opportunities and whether or not they have a desired strategy that would deal with such threats and opportunities. Van Der Woerd, Levy and Begg (2002) state that the impact of climate change on businesses can be very substantial especially in the insurance sector. A view of the healthcare insurance and services sector contrasts against the natural order of

mitigation and adaptation strategies employed by organisations in other sectors that align to the reduction of greenhouse gas (GHG) emissions and energy efficiencies with effects on anthropogenic or human induced climate change (Jones & levy, 2007; Kolk & Pinkse, 2004).

#### **1.4 Relevance of Research**

The current state of knowledge about climate change and its health effects is such that measures for health protection are recommended (Haines et al., 2006). With climate change already underway, there is a need to assess options in the health sector and in sectors that have direct links to human health (Haines et al., 2006).

#### **1.5 Scope of Research**

The research is focused on investigating the strategic responses of the private healthcare funders in South Africa. The private healthcare insurance sector in South Africa is divided into two types of medical schemes, being open and restricted schemes. It is proposed that respondents will be selected from each of the types of brokerages. This will not only allow for an evaluation of strategic responses of an industry as a whole, but in addition, a comparative component would be a possibility as an evaluation for within sector differences in responses.

## 1.6 Research Objectives

The research aims to gather a deeper understanding of how the private healthcare funders in South Africa are adapting strategically to global climate change and as such the study is qualitative in nature allowing for description, evaluation and exploration.

More specifically, the study is expected to:

- Determine if global climate change poses a strategic concern to private healthcare funders in South Africa;
- Identify the strategic approach / response of the organisations in view of risks posed by climate change;
- Identify the strategic approach / response of the organisations in view of opportunities posed by climate change.
- Frame the overall responses of the organisations within the framework of the Reactive-Defensive-Accommodative-Proactive (RDAP) scale continuum model.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

Climate change according to the Intergovernmental Panel on Climate Change (IPCC) refers to a change in the state of the climate that can be identified, using statistical tests, by changes in the mean and / or the variability of its properties and that persists for an extended period, typically decades or longer (IPCC, 2007). It refers to any change in climate over time, whether due to natural variability or as a result of human activity (IPCC, 2007).

Climate change is an international environmental issue that has increasingly attracted business attention because of its actual or potential strategic impact on many companies (Kolk & Pinkse, 2004). Climate change poses strategic dilemmas for companies across a range of industries (Kolk & Pinkse, 2004). It has been noted that businesses have adopted a more constructive stance that acknowledges the reality of climate change and its responsibility for addressing the issue (Jones & Levy, 2007). Furthermore, the exact composition of an integrated strategy is company specific, depending on the perceived risks and opportunities related to climate change, the type of industry and the countries in which companies operate (Kolk & Pinkse, 2005).

According to Kolk & Pinkse (2004), there are many drivers for corporate activity regarding risks / threats and opportunities due to climate change. For example, in the insurance sector, one inference for risk is the implication of climate change on their customer base due to increasing insurance costs; while an opportunity for competitiveness lies in new, innovative product development that address the risks of climate change.

Many organisations, according to Jones and Levy (2007), have adopted a more constructive position regarding the realities of climate change and the responsibility of addressing this issue. There is growing consensus among corporate leaders that taking action on climate change is a responsible business decision (Claussen, In: Hoffman, Glancy, Horn, Pryor, Shahinian & Shopoff, 2006).

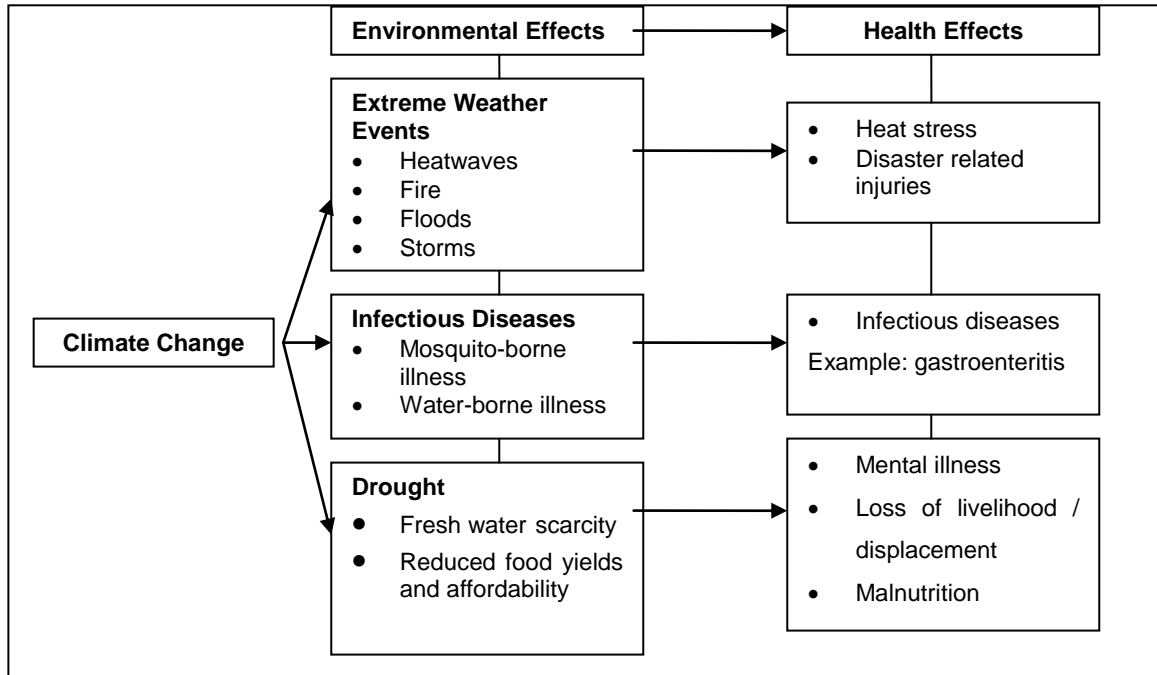
## **2.2 Climate Change and Public Health**

Climate change is a global public health problem, with serious health impacts predicted to manifest in varying ways (Blashki, McMichael & Karoly, 2007). Rising average global temperatures threaten to disrupt physical, biological and ecological life support systems on which human health depends (Blashki et al., 2007).

The health impacts of climate change can occur through a number of direct and indirect causal pathways (Blashki et al., 2007). Figure 1 provides an overview and illustrates the pathways by which climate change can impact on health.



**Figure 1: Pathways by which Climate Change Impacts on Health**



**Source: Adapted from Blashki et al., 2007.**

The effects of climate change on health are likely to be predominantly negative and impact most heavily on low income countries where capacity to adapt is weakest, but also on the most vulnerable groups in developed countries (Haines et al., 2006).

Haines et al., (2006) also suggest that climate change will be experienced against the backdrop of other global changes, including amongst others, population growth, effects of urbanisation, land use changes and the depletion of natural resources. These factors magnify the implications on public health (Haines et al., 2006) and thus on human vulnerability.

## 2.3 Theory of Corporate Strategy

According to Haugstad (1999), *strategy theory* is a diverse multidisciplinary academic field with competing schools of thought based on incommensurable basic assumptions. He goes further in stating that a lack of agreement exists for a usable definition of what makes a strategy become a strategy (Haugstad, 1999).

Hax and Majluf (1988) reviewed the definitions of strategy offered by leading academics in the field. Some of these findings are highlighted:

- Strategy is a coherent, unifying, and integrative blueprint of the organisation as a whole. They quote Glueck (1976): *“Strategy is a unified, comprehensive, and integrative plan designed to assure that the basic objectives of the enterprise are achieved”* (Hax & Majluf, 1988).
- Strategy is a response to external opportunities and threats. They quote Argyris (1985): *“Strategy formulation and implementation include identifying opportunities and threats in the organisation’s environment (...)”* (Hax & Majluf, 1988).
- The central role of strategy is not viewed as simply responding passively to the opportunities and threats presented by the external environment, but the organisation is continuously and actively adapting to meet the demands of a changing environment. They quote Mintzberg (1979): *“Strategy is a mediating*

*force between the organisation and its environment: consistent patterns of streams of organisational decisions to deal with the environment” (Hax & Majluf, 1988).*

James Quinn in 1998 defined strategy as: ( ... ) *the pattern or plan that integrates an organisation’s major goals, policies and action sequences into a cohesive whole. A well-formed strategy helps to marshal and allocate an organisation’s resources into a unique and viable posture based on ( ... ) anticipated changes in the environment ( ... )* (Haugstad, 1999).

It is of importance to mention here that the term “environment” is referred to as the organisation’s external environment in which it operates rather than environmental issues such as climate change.

Strategy can thus be seen as a multi-dimensional concept that embraces all the critical activities of an organisation as well as facilitating the changes induced by its environment (Hax & Majluf, 1988). Strategy attempts to achieve a long-term sustainable advantage by responding properly to the opportunities and threats in the firm’s environment (Hax & Majluf, 1988).

SWOT analysis (for strengths, weaknesses, opportunities and threats) is one of the most basic analytical tools used to study strategies (Miller, 1998). External organisation environment analysis lies in a firm’s opportunities and threats (Miller, 1998). This study thus attempts to explore the strategic responses of private

healthcare funders to global climate change; a single inciting agent in the external environment of organisations for strategy formulation and implementation under the definitions provided.

Zan (1990) describes a framework for conceiving an organisation's behaviour – its strategies – in terms of differentiating and distinguishing processes. This is what he believes emphasises the distinctive nature or uniqueness of an individual organisation. He suggests that the uniqueness of an organisation is associated with three assumptions: (1) that a subjectiveness or identity is attributed to the organisation; that the organisation possesses degrees of freedom in responding to stimuli from the environment; (2) The exercise of power is recognised in firm-environment relationships; and (3) Organisations are conceived as functioning in situations of uncertainty (Zan, 1990).

Zan (1990) describes a typology of the concepts of strategy based on two characteristics of underlying approaches: interpretative and policy-making and which discern a descriptive or evaluative tone. This typology is illustrated in Figure 2.

**Figure 2: A Typology of the Concepts of Strategy**

		APPROACH	
		Interpretative	Policy-making
APPROACH	Descriptive	Strategy as behaviour: The LOGIC of the firm	Strategy as choices
	Evaluative	Strategy as winning behaviour	Strategy as winning choices

**Source: Adapted from Zan (1990).**

From Figure 2, the descriptive / interpretative approach assigns to strategy the meaning of the uniqueness attained by the organisation. Strategy is thus the logic of the organisation's behaviour (Zan, 1990). The use of the descriptive / interpretative approach to describing strategy is further explained in the methodology section (Chapter Four).

## 2.4 Characteristics of the External Business Environment

A study by Aragon-Correa and Sharma (2003) sought to explain how certain characteristics of the general external business environment – uncertainty, complexity and munificence – moderate the relationship between the dynamic

capability of a proactive environmental strategy and competitive advantage. They drew upon one of the principles of Contingency Theory in that different levels of environmental variation require different degrees of strategic formality (Aragon-Correa & Sharma, 2003). They also accept the view that the general business environment can influence an organisation's strategy; however, it does not mechanistically determine this strategy (Aragon-Correa & Sharma, 2003). The Contingency Theory of organisations holds that the optimum organisational structure is primarily dependent on the external environment of the enterprise (Negandhi & Reimann, 1972). In other words, an organisation's structure and functioning are dependent on its interface with the external environment (Negandhi & Reimann, 1972).

#### **2.4.1 Uncertainty**

A breakdown of business environment uncertainty into three types was provided by Milliken (1987). These three types of uncertainty are labelled: State Uncertainty (or perceived environmental uncertainty), Effect Uncertainty and Response Uncertainty.

A brief description of each type is provided:

#### **2.4.1.1      *State Uncertainty***

State uncertainty is a perception that the organisational environment or a component thereof, is unpredictable. It is used to describe a perceptual experience of uncertainty and not an objective state of the world (Milliken, 1987; Aragon-Correa & Sharma, 2003).

#### **2.4.1.2      *Effect Uncertainty***

Effect uncertainty occurs when there is an inability to predict what the impact of general business environmental events or changes will be on an organisation (Milliken, 1987; Aragon-Correa & Sharma, 2003).

#### **2.4.1.3      *Response Uncertainty***

Response uncertainty is associated with attempts in understanding what response options are available to the organisation and what the consequences of a response choice are (Milliken, 1987; Aragon-Correa & Sharma, 2003).

### **2.4.2    Complexity**

Aragon-Correa and Sharma (2003) define complexity in the general business environment as proliferation and diversity of factors and issues in that environment.

They specifically make reference to the scientific debate around environmental issues such as global warming (and hence global climate change) as a factor that contributes to complexity in the external business environment (Aragon-Correa & Sharma, 2003).

From the above analysis of the external business environment it is evident that the context of global climate change poses both a complexity issue as well as strategic uncertainties for organisations.

The research shows more specifically how global climate change and its health effects poses elements of uncertainty and complexity for private healthcare funders addressing the health insurance needs of a population affected by climate change.

## **2.5 Corporate Response Models**

Much of the current literature on business responses to climate change focus on two specific aspects: (1) mitigation; which focuses on reduction of greenhouse gas (GHG) emissions and thus reduction in anthropogenic climate change and (2) adaptation; which focuses on change in organisations to either innovate energy efficient products (Jones & Levy, 2007) in light of green consumerism or behave in more acceptable ways and addressing aspects of “sustainability” or “sustainable development” (Hansel, 2009).



Organisations, in general, initially aimed at primarily influencing the policy debate regarding climate change however, corporate strategies have increasingly included economic responses such as wanting to develop new market opportunities arising from risk coverage or emerging GHG emission trading systems (Kolk & Pinkse, 2004). This study aims at identifying the overall strategic responses of the private healthcare funders in South Africa to global climate change in relation to a strategic posture model that is described.

In line with the literature on environmental management, both continuum models as well as typologies, such as those described by Doty and Glick (1994), have been used (Kolk & Pinkse, 2004). A continuum model is a linear classification scheme that identifies a development in time (Kolk & Mauser, 2002), whereas a typology consists of conceptually derived interrelated sets of ideal types (Doty & Glick, 1994). However, Doty and Glick (1994) reiterate that a typology is not merely a classification system. Kolk and Mauser (2002) suggest that typologies help to identify different reactions in a more general way, usually without assuming an automatically growing responsiveness over time.

Kolk and Mauser (2002) argue that in spite of their value for practical purposes, application of existing continuum models cannot be easily applied to organisation's actual behaviour and have proved practically impossible. They state that although conceptually based typologies provide a rough understanding of the responses that organisations make, the weaknesses in the models become evident when operationalisation is attempted. As a result, they have limited suitability for specific

situations and insufficiently reckon with organisational and strategic complexities (Kolk & Mauser, 2002).

One example of a continuum model is the RDAP scale (Kolk & Pinkse, 2004). It is interesting to note that refutation of the use of continuum models in the article by Kolk and Mauser (2002) does not make any specific mention of the RDAP scale or its application.

## **2.6 The RDAP Scale Continuum Model**

The RDAP scale has been adopted from a well-known classification on corporate social responsibility (Clarkson, 1995). RDAP is an acronym for: reactive, defensive, accommodative and proactive.

The RDAP scale is based on the concepts identified by Carroll (1979) and Wartick and Cochran (1985) in their models of corporate social performance, responsibility and responsiveness (Clarkson, 1995). Clarkson (1995) suggests that Carroll (1979) and Wartick and Cochran (1985) used the terms to characterise corporate strategy or posture toward social responsiveness and performance.

Clarkson (1995) also suggests that despite the use of the RDAP scale clearly introducing qualitative terms such as reactive, accommodative, defensive and proactive, these terms are appropriate for the purpose of characterising a management's strategy or posture toward a particular stakeholder group

concerning one or more stakeholder issues. Aragon-Correa and Sharma (2003) used this same scale to describe corporate strategies for managing the interface between business and the natural environment with classifications along this continuum which ranges from reactive on one end to proactive on the other end.

On the RDAP continuum model described in Table 2, responses range from a reactive stance, which denies responsibility, at the one end, to proactively at the other, where business managers anticipate developments (Kolk & Pinkse, 2004). In between these two extremes, defensive and accommodative postures can be seen characterised by, respectively, reluctant admission and acceptance of responsibility (Kolk & Pinkse, 2004).

**Table 2: The Reactive-Defensive-Accommodative-Proactive (RDAP) Continuum Scale**

<b><i>Rating</i></b>	<b><i>Posture / Strategy</i></b>
<b><i>Reactive</i></b>	Deny responsibility that climate change would pose a strategic concern to the organisation; and would focus on risk mitigation if and when it arises.
<b><i>Defensive</i></b>	Admit responsibility that climate change poses a strategic concern to the organisation; but fight against having to change core business strategy in dealing with risks posed.
<b><i>Accommodative</i></b>	Accept responsibility that climate change poses a strategic concern; and consider having to address changes to core business strategy in view of a changing global climate to address risks and opportunities.
<b><i>Proactive</i></b>	Anticipate responsibility of global climate change as a strategic concern to the organisation; and anticipating addressing the risks of global climate change as well as exploring potential related opportunities.

**Source: Adapted from Clarkson, 1995.**

For the purposes of this study, the RDAP scale has been adapted to categorise and reflect in its simplicity the overall strategic responses of the private healthcare funders in South Africa to global climate change – a single inciting event that exists in the external business environment of these organisations and posing elements of complexity and uncertainty for strategic posturing – both now as well as in the future.

## CHAPTER THREE

### RESEARCH QUESTIONS

According to Zikmund (2003), a research question is defined as: *“the researcher’s translation of the business problem into a specific need for inquiry”*.

From the literature we identify that global climate change poses both elements of uncertainty and complexity in the external business environment of organisations and as such, broad-based questions of inquiry are used to explore the strategic responses of these organisations. The research questions are expected to highlight the risks / threats and opportunities these organisations are facing and what strategic options are implemented in this context. An overall strategic posture within the adapted framework of the RDAP continuum scale would then be applied.

Since the methodology is based on case study research, the questions form the basis of discussion. They are broad-based questions that seek to explore answers to the main research question. Issues identified during the interview process would be probed for further clarification should that be a requisite.

## **Research Questions**

### **Research Question 1**

What is the extent to which global climate change is considered a strategic issue and concern to private healthcare funders?

### **Research Question 2**

What are the risks or threats posed to private healthcare funders in view of global climate change?

### **Research Question 3**

Are there strategic opportunities which global climate change may offer private healthcare funders?

### **Research Question 4**

What are the strategic responses of private healthcare funders to global climate change?

## CHAPTER FOUR

### RESEARCH METHODOLOGY AND DESIGN

#### 4.1 Introduction

The research aimed to investigate, by means of a qualitative research design, the strategic response of private healthcare funders in South Africa to global climate change. The methodology is important because of the data gathering process as well as the type and quality of the data received which would affect the overall quality of the research study.

The nature of the research questions indicates a qualitative research design. In fact, a case study approach to the methodology would seem appropriate for numerous reasons. Dul and Hak (2008) define a case study as a study (research project) in which “one case (single case study) or a small number of cases (comparative case study) in their real life context are selected, and scores obtained from these cases are analysed in a qualitative manner”. Yin (2003) defines a case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident”.

Case study research is one option for researchers seeking to undertake a modest scale research project based on comparison of a limited number of organisations and may offer insights that may not be achieved with other approaches (Rowley, 2002). Case study methodology is also particularly well suited to new research areas or research areas for which existing theory seems inadequate (Eisenhardt, 1989).

Case study research is appropriate when causal links between the ‘how’ and ‘why’ of what it is that is being investigated is not simple enough to be analysed through the use of surveys or experimental methods (Eisenhardt, 1989; McGuire, 1997) as well as when multiple outcomes may result from a single research question (McGuire, 1997). Rowley (2002) feels that case study research is useful in providing answers to ‘how’ and ‘why’ questions and could therefore be used for exploratory, descriptive research. Case study methodology is thus useful when “a ‘how’ or ‘why’ question is being asked about a contemporary set of events over which the investigator has little or no control” (Yin, 2003).

A case study methodology is suitable in cases where the data collection technique is through the use of interviews, observation and other sources of data (Bonoma, 1985). A review of website documents of the organisations interviewed in view of climate change policy and sustainability practices was also conducted. Bonoma (1985) further states that the goal of data collection in case study research is not quantification and enumeration but rather (1) description, (2) classification or typology, (3) theory development, and (4) limited theory testing. According to



Zikmund (2003), the case study method involves intensive investigation of one particular situation that is similar to the problem under investigation. In summary, the goal of case study research is to create understanding about the research question.

The method of analysis is qualitative in nature and the outcome is only worthwhile as an exploratory study. The results are not likely to be conclusive unlike the case of a quantitative, descriptive analysis (Zikmund, 2003). However, the study may point out future needs for research on this subject matter.

## **4.2 Unit of Analysis**

The unit of analysis forms the basis of a case (Rowley, 2002). The unit of analysis in this study is what ultimately constitutes the case. The research problem focuses on the strategic response of private healthcare funders in South Africa to global climate change and as such, the unit of analysis is the response of healthcare funders; with each of the organisations forming an individual case.

## **4.3 Population of Relevance**

The South African private healthcare insurance industry or medical aid schemes is comprised of both restricted and open schemes. It was proposed that interviews be conducted in both these sectors as well as an interview of the industry board. In

selecting the specific organisations, the larger schemes would be most viable. It was also proposed that the different types of schemes, whether open or restricted, may present with different strategic responses to global climate change and thus a comparison of responses would be articulated.

In view of this, the companies chosen for each of the case studies would be done on the basis of replication and are chosen for their relevance rather than their representation (Perry, 2001). The organisations selected to participate in the study would be selected on a convenience, non-random sample basis (Zikmund, 2003).

According to Perry (2001), the literature on case studies as methodology for research, does not give precise guidelines as to the number of cases to be used and this decision is often left to the researcher. Perry (2001) does however provide some guidelines for the number of cases to be used:

- Provided the case is vital to the proving or disproving of a theory and is the only one of its kind and “unusual access” has been granted for academic purposes, Perry (2001) does not recommend only utilising one case.
- When making use of more than one case, which is generally the norm, Perry (2001) borrows from Eisenhardt (1989) who suggests that between four and ten cases be utilised, with no fewer than four cases.

#### **4.4 Sample Selection**

A purposive (judgement) sampling technique, which is a non-probability sampling technique, was used to select the most appropriate candidate from each of the organisations for the interviews (Zikmund, 2003). Key respondents in the private healthcare insurance industry were interviewed. Key respondents involved in the strategy design process of the dominant players in the industry, were able to respond directly and comprehensively to interview questions and provide data required to respond to the research questions asked. The respondents would have the relevant experience and expertise required to address the research questions. They would be able to effectively express the strategies that are undertaken by their respective companies in line with global climate change. These are the people who know exhaustively what it is the research question attempts to answer as specific responses are not available from any other sources.

The purpose of surveying such experts would be to help formulate the problem and clarify concepts of strategic response rather than develop conclusive evidence (Zikmund, 2003). The knowledge that would be obtained from the expert respondents would thus represent the overall strategic responses of the South African health insurance industry.

## 4.5 Data Gathering Approach

The basis for the data gathering is through the case study approach. Personal interviews allowed the gathering of information through face-to-face contact with the appropriate individuals identified in the sample (Zikmund, 2003). In addition, personal interviews provided an opportunity to follow up and request clarity from the person being interviewed in light of a more comprehensive explanation (Zikmund, 2003).

Zan (1990) applies the descriptive / interpretive approach from his typology of the concepts of strategy which is that “strategy is the logic of the firm’s behaviour” into a methodological context. From an external or objective point of view – apart from the subjectivity of the analyst’s own perceptions or biases – factual interrelationships between the components of the firm and the environment are investigated and the meaning / logic of the organisation’s behaviour is reconstructed (Zan, 1990).

Through interviews, strategy details could be attained (Lim, Ahn and Lee, 2005). Other than reviewing available website reports, in-depth, semi-structured interviews with the few knowledgeable individuals in the private healthcare insurance industry took place. A broad discussion within the confines of an interview guide (Appendix 1) was utilised. The respondents were able to respond to and discuss questions in a broad-based manner with few constraints (Zikmund, 2003). Anonymity of the organisation’s names and the names of the key

respondents was left out for confidentiality purposes. Respondents were requested to sign an informed consent form prior to initiating the interviews. The informed consent form is added as an addendum (Appendix 2).

The rationale for using semi-structured interviews is described by (Gillham, 2005) and includes the following criteria:

- The same questions would be asked of all respondents
- The questions used would ensure topic focus
- Equivalent coverage would be ensured; in other words, respondents could be prompted with supplementary questions
- The time for each interview would be approximately the same
- Open-ended questions coupled with structured questions would be asked so as to introduce flexibility into the interviewing process and ensure that rich information would be obtained
- The interviewing process would allow a strong element of discovery whilst the structured focus would allow an analysis in terms of commonalities.

The interview schedule allowed a limited number of open-ended items encouraging exploration of strategic issues.

#### **4.6 Data Analysis**

This research can be viewed as either multiple small case studies of different organisations or could be viewed as a single, large case study of strategic

responses of organisations in a single industry to global climate change. However, when analysing multiple case study information, it is advised to first analyse the individual cases before addressing cross-case analysis (Perry, 2001). The reasoning is that individual cases make up the building blocks for cross-case analysis. The cross-case analysis offered similarities and differences to be analysed (Perry, 2001).

The data analysis process began with transcription of the recorded interviews. Thereafter, the content required analysis which was done through the coding of the interview content. This thematic coding or grouping of words was placed into categories (Zikmund, 2003). The themes and codes that become apparent were then arranged for analysis and interpretation. According to Miles and Huberman (1984, in Perry, 2001), codes can be seen as “retrieval and organising devices that allow the analyst to spot quickly, pull out, then cluster all the segments relating to the research questions”. The themed and analysed interview content was then applied in the discussion in Chapter Six in view of the literature that supports strategic responses to global climate change.

#### **4.7 Limitations of Methodology**

Five potential limitations, related to the use and application of the methodology, were identified from the research process, and include:

- Respondent bias may exist in the responses that were provided because organisations wanted to portray themselves positively from a strategic response perspective.
- Interviewer bias may present in the results due to subjective interpretation of the data that was collected.
- The use of judgemental sampling may not have created sufficient representation for data collection from the organisations and thus the data provided may not entirely be meaningful.
- The maturity of the topic of strategic responses to global climate change in the research population may be weak and in turn affected the ability to effectively answer the research questions proposed.
- Due to the nature of the research design, the results may not be extrapolated to other organisations as well as other industries.

## **CHAPTER FIVE**

### **RESULTS**

#### **5.1 Introduction**

The information obtained by means of semi-structured, in-depth interviews with the respective respondents from private medical schemes as well as availability of information from websites and reports was used to answer the proposed research questions, and in so doing, determine the strategic postures of private healthcare funders as a response to global climate change within the framework of the RDAP scale which is presented in Chapter Six.

The qualitative nature of the responses is presented in an attempt to understand the intricacies involved in dealing with a complex and uncertain environment. The aim of this chapter is not to attempt to explain such responses but rather the purpose is to present the findings in an orderly manner with reference to the verbatim responses from the interviews conducted. A summary of the interview transcriptions by research question and company has been included (Appendix 3).



### 5.1.1 Description of Sample

A total of five interviews were conducted with responses given in view of six organisations. Included in the sample were the private healthcare industry board, two restricted medical aid schemes and three open medical aid schemes. Access to the key respondents as well as access to the organisations and their willingness to participate in the research study posed to be a key challenge. Table 3 outlines and summarises the types of medical aid schemes interviewed.

**Table 3: Types of Medical Aid Schemes Interviewed**

<b><i>Industry Board</i></b>	<b><i>Company A</i></b>	<b><i>Company B</i></b>	<b><i>Company C</i></b>	<b><i>Company D</i></b>	<b><i>Company E</i></b>
Board of Healthcare Funders (BHF)	Restricted Medical Scheme	Open Medical Scheme	Restricted Medical Scheme	Open Medical Scheme	Open Medical Scheme

The interview for Company B and Company C was conducted concurrently with the same respondent. The respondent for these two organisations was the administrator for both the open (Company B) and restricted (Company C) schemes respectively.

For Company B and Company C, the administrator for both the open (Company B) and restricted (Company C) schemes was the relevant respondent. He was able to offer insights regarding the differences between the two organisations as well as their strategies. According to the respondent, although the scheme develops the strategy, it is the role of the administrator to roll out the strategy on the scheme's

behalf. The respondent reinforced the fact that although the administrator is only a vendor of service to the scheme, in their case, they are also effectively involved at the critical level of product design.

Company D was the only organisation interviewed that presents in their Sustainability Report for 2009 on their website, that one of the factors that influences their decision-making on material issues for their business in view of risks and opportunities, is global sustainability issues such as climate change.

### **5.1.2 Confidentiality**

For the purposes of confidentiality, the identities of the organisations interviewed have intentionally not been disclosed in the research findings. This is in line with the research methodology outlined in Chapter Four. Ensuring confidentiality, which is not only deemed ethically responsible, also assisted in obtaining unbiased, informative responses from the respondents. Confidentiality was ensured by coding the actual organisation names from the sample under fictional names such as *Company A*, *Company B* and so on and presenting the research findings in such a way that the organisations could not readily be identified. The quality and content however have not been altered in any way.

## 5.2 Extent to which global climate change is considered a strategic issue and concern to private healthcare funders

Other than the board of healthcare funders (BHF) (Industry Board) that states: *“I don’t think that medical aid schemes and certainly the board have not looked at global climate change from a strategic point of view”* and Company E that states: *“We have not at all seen climate change as a strategic issue. It has never come up. Because the scheme has to focus on having a good solvency ratio, we haven’t seen that global warming plays a role there. The goal to strategise is very short term in this industry and something like global warming is really not a priority”* and whose sentiments are that global climate change does not pose a strategic concern and have not thought about global climate change as a strategic concern respectively, the main themes highlighted include:

- Response of the insurance industry to catastrophes and natural disasters as a stimulus for thought about climate change and the implications on health insurance.

Company A: *“It certainly has been raised that it is an issue; and how it was raised is that it would affect the insurance industry in general, where if you look at the increase in natural disasters, the insurance industry would be affected by that. The natural thing is that during those times, you would also have health consequences”*.

- The advent of the H1N1 virus and its rapid ascension to becoming a communicable disease and the implications on a global changing burden of disease and global disease patterns.

Company B and Company C: *“From a schemes perspective we are talking about it at disease level. We have thought through it and it was the advent of H1N1 and how that became a communicable disease so easily, made us think about how many other issues are communicable. And by virtue of climate change and environmental changes what other diseases are being created by climate change that we don’t understand yet and are potentially on the rising for us; and what diseases based on the change of temperatures and changes in environments where humans are not necessarily used to operating in those environments are then going to be more powerful and then humans become more susceptible to in those environments”.*

- Governing organisational strategy: mission and values.

Company D: *“We have definitely considered climate change as a strategic issue to the organisation. There are three pillars under which we frame this. The first is what we take as our governing strategy”.*

- Corporate Social Responsibility (CSR) and Sustainability.

Company D: *“The second pillar falls within the sustainability argument and the line of thinking around corporate responsibility; it is not only about our key mission but it is also about being a responsible corporate citizen. There is an acknowledgement to corporate social responsibility (CSR). Global climate change is not one of our top three strategic concerns at the moment but it is on the mantra within the sustainability type of mindset”.*

Company E: *“We believe in people taking responsibility for their own actions, their own health, making the right health choices and with that obviously trying to be environmentally friendly in what we do and encourage our members to keep their own carbon footprint as low as possible”.*

- Innovation strategy.

Company D: *“The third pillar is in the governing theme that runs in our innovation programmes that have an environmental flavour to it; and where we see innovation going”.*

### 5.3 Risks or threats posed to private healthcare funders in view of global climate change

Despite some of the scepticism displayed by the respondent from the Industry Board who states: *“I don’t think that the funding industry and the individual schemes have thought about it at these levels”*, the main risks that private healthcare funders could potentially be facing have been identified.

It is vital to note that due to the nature of the response to Question 1, the respondent for ‘Company E’ was unaware of some of the potential risks posed to the scheme in view of global climate change and some scenarios were posed to the respondent while probing for further information in order to determine if these would contribute to the risk profile of the organisation.

The following main themes identified include:

- Change in the burden of disease and the implications on new product innovation, design and development.

Industry Board: *“One issue is the impact of global warming on disease distribution and therefore benefit design”*.

Company B and Company C: *“There is the element of how environmental issues impact the requirements of the members of the scheme with regards to product. For Company B, being an open scheme and having a varying set of members across many industries, makes it difficult to design products specific to certain demographics unlike that for Company C which is a restricted scheme and understands its demographic of members”.*

- Change in the burden of disease and the implications it would have on increased healthcare claims and costs for chronic, acute and lifestyle illnesses.

Company A: *“There is the clinical side, where there are healthcare claims for illnesses, and if global warming or climate change is going to change that pattern, then it would have an effect on us and change our burden of disease. Our burden of disease relates largely to a number of areas: chronic illness, illnesses of lifestyle, genetic disorders and acute conditions. If climate change affects any of those, then there will be a change in the burden of disease and that will affect the scheme”.*

Company B and Company C: *“The schemes are certainly seeing a change in the burden of disease and we are speculating that potentially one of the reasons may be a change in the environment that the scheme members are operating in. It is hard to tell if the changing burden of disease is directly related to climate change but if taken the obvious, the obvious indicates that there must be an impact. The risks are associated to the bottom line with regards to increased spend which then*

*effectively increases the cost of healthcare. This then obviously poses a risk and a vulnerability to the funds themselves”.*

Company D: *“In the same way we view the global incidences of Diabetes that pose a risk to the organisation or the rise of the HIV pandemic, the risks are essentially the costs – the healthcare and life related costs. The impact of carbon emissions in terms of respiratory disorders, for example, creates a reality that there is a link between climate related issues, health and healthcare costs”.*

Company E: *“A change in the burden of disease would definitely affect more lives and would increase the cost of health and therefore influence the bottom line”*

- Changing weather patterns leading to natural catastrophes and disasters with a risk on human health.

Company A: *“One thing which could happen is if there was an increase in major weather patterns – which we have seen internationally – we cannot re-insure for catastrophes so if there was a catastrophe which is related to climate change, we would not be able to re-insure for that”.*

- Varying medical scheme demographic and geographic changes and a shift in target market for product initiatives.



Company A: *“Because we are a restricted scheme, our demographic depends on what the industry that we serve looks like from that sense. We have an aging population inside the medical scheme environment; and so potentially changes in member demographic would potentially create a different target market”.*

Company B and Company C: *“The certain geographies in which some of our members operate – being in either Company B or Company C – potentially have much higher incidences of impact with regards to global climate change”.*

Company E: *“Being an open scheme, anyone is free to join. If the average age continues to rise year-on-year then this poses a risk. Not knowing all our members demographics such as where they work and in what industries they operate in also poses a risk”.*

- Changing Consumer Demands.

Company B and Company C: *“Employers of our members in both our schemes are becoming or are being forced into the space of sustainability and triple bottom line reporting. The fact is that we service the people in those industries which means that if they are becoming more acutely aware and if we are not in tune to them, it could become prohibitive of our schemes not being in those industries. Our clients will look more favourably on organisations that are more in tune with issues related to climate change”.*

Company D: *“Another risk would be that if our organisation is seen as being the only one not in the fold on this issue while everyone else is playing the game which speaks to our consumer demand, then that poses a threat to our business”.*

- Depletion of Resources.

Company D: *“Some of the risk stems from a fabric of society issue that if we start to think about it in terms of depletion of resources and how that will affect our business function, then those kinds of challenges become quite interesting”.*

#### **5.4 Strategic opportunities which global climate change may offer private healthcare funders**

Company A suggests: *“The schemes are too small and the industry is too small to start looking at major initiatives and would have to be looked at from the Industry Board”.* The Industry Board responded by stating: *“I don’t believe that the opportunities are because of global warming”.* However, some insights were provided by the organisations interviewed.

The main themes of ‘strategic opportunity’ offered to private healthcare funders in view of global climate change have been identified and include:

- Product Design and Product Offerings.

Company B and Company C: *“An extent the schemes can really only look at this issue is the extent of product design because this is pretty much at the beginning and end strategically where the schemes stop”.*

Company D: *“Following our ‘product development philosophy’, if our competitors had to come out with a product that they called the ‘green’ product, we would aspire to do something a little more fundamental. We would need the right opportunity that we felt was meaningful and could generate a long term impact and not just put a ‘green’ label on it to simply add a few small percentage points for growth”.*

Company E: *“If by merely saying about the way we run our business that we are environmentally friendly and our carbon footprint is almost zero and then introduce products that are a little bit more holistic in their offering, then there may be opportunities there”.*

- Marketing and Marketability Opportunities

Company B and Company C: *“The awareness of the public around climate change and global climate issues is increasing. Anybody who is seen linking their products to a ‘green’ issue gets more awareness and more sensitivity in the selling space. It’s a marketability issue”.*

Company E: *“There are definite marketing opportunities around the impact of global warming going forward”.*

- Stakeholder Relationships

Company A: *“From the point of view of perception, there is an opportunity to show a perception of caring by giving information on the subject by writing articles. It gives an easier in to say: “Statistics show that average temperatures have risen by ‘X%’ over the last few years and so the incidence of disease is affected by it.” The opportunity is there from an education and caring perception”.*

Company B and Company C: *“Because ‘triple bottom line’ reporting has become something that our clients are preaching and they have to be living it as much as they are preaching it, then their vendors of healthcare must be living it as well. There is an advantage to getting closer to our clients from this space”.*

- Financial Opportunities

Company D: *“There is a world of ‘more selective consumers’ which means that on the one extreme you can have the idea of charging more for a premium product on the premise that it does something good for them along the lines of ‘wellness’ and people will spend money on it; that poses a commercial opportunity. The other extreme is that in the longer term, if we can encourage our clients to do a little*

*more with their lives, and we can have better healthcare costs than our competitors, and we are positioned well in that space, it would introduce a competitive advantage in line with healthcare insurance”.*

Industry Board: *“The funding industry has been thinking about moving towards electronic submissions of claims. It is a way for the schemes to improve efficiencies and reduce certain administrative costs. The opportunity is there because the schemes are looking at the cost efficiency side for themselves in terms of the bottom line”.*

- Competitive Advantage

Company B and Company C: *“If we address the issue by virtue of saying that we are sensitive to climate change and protecting the individual and potentially their families then there is some strategic advantage therein especially by attracting new business because of it”.*

Company E: *“There is definitely an element of people who believe in looking after the environment and have a bigger issue with global warming so we could take advantage of that if we as a scheme said that we take global warming very seriously and this is what we are doing to minimise the impact. We may even be able to attract new customers or people from other schemes who have a positive perception of what we are doing”.*

## 5.5 Strategic responses of private healthcare funders to global climate change

A doubtful view of strategic responses was portrayed by the Industry Board. The respondent stated: *“With medical schemes, the way the regulatory framework is, if the schemes are doing a six month plan, it is too long. That is the dynamics of this industry. If looking at the long term, 20 to 25 years, I would say that global climate change is not a priority right now to consider. Because the schemes are working from hand-to-mouth from one year to the next, I don’t think they are thinking of these kinds of issues now”*.

The other organisations interviewed contributed to the key strategic themes which were identified as:

- Triple Bottom Line Reporting

Company A: *“We have all the policies in place to make sure that we are doing the right thing and we look at it on an ongoing basis. This is reinforced by ‘triple bottom line’ reporting – that we are doing things from sustainability, social, ethical and transformational point of views”*.

- Carbon Footprint

Company D: *“Carbon footprint and related issues are very much addressed on the CSR and sustainability level. The environmental components of the sustainability issues are certainly being looked at by the sustainability team”.*

Company E: *“We are doing small, touchy-feely things such as addressing carbon footprint because of corporate responsibility”.*

- Community Responsibility

Company A: *“From a ‘sustainability’ point of view we are trying to do the right thing”.*

Company E: *“It is important for us to give back to our communities and it is about feeling good about what we do”.*

- Recycling and Printing Policies

Company A: *“We play our own role in preventing climate change – from recycling and printing on both sides of paper - to all these types of issues. We cannot ignore the issues of sustainability and it has been factored into the equation so that we operate by trying to do as little damage as possible”.*

- Energy Efficiency

Company B and Company C: *“In the healthcare funding business we do not really have to be careful of spewing carbon emissions or carbon footprint into the atmosphere because from an organisation perspective the service environment does not really affect that. We are however sensitive to and are in tune with related issues such as saving on electricity”.*

- Disease Management Programs

Company B and Company C: *“In our disease management space, we are looking at impacting lifestyle diseases and changing the way people live and that goes down to the basic fact that water, sanitation, food and those issues, which are hugely impacted by climate change, that the education in that space is where we believe we have a reason to spend money because it manifests in the risk of being sicker or healthier”.*

- Flexible Benefit Structures

Company B and Company C: *“We are responding by ensuring that we have benefit structures that are open enough to be able to anticipate the unknowns. In our closed scheme (Company C) benefit structure specifically, the benefits are rich on the risks portion and even more importantly is very rich in diagnostics in order to*



*make sure that the things that are coming out of the wood-work at us can be dealt with”.*

- Product Design Initiatives

Company D: *“At the moment there is a lot of thought around product initiatives and it is on the agenda of the strategic issues - it is probably one of about six strategic headings that we are looking at for next year in our product development cycle”.*

## **CHAPTER SIX**

### **DISCUSSION OF RESULTS**

#### **6.1 Analysis of Sample**

##### **6.1.1 Quantity of Responses**

As mentioned in Chapter Five, a total of five interviews were conducted in view of six organisations. This suggests that a total of six case study responses were generated through the interview process. The number of responses thus fits in alignment with the guidelines provided by Perry (2001) and Eisenhardt (1989) described in Chapter Four and who suggest that between four and ten cases be utilised.

##### **6.1.2 Quality of Responses**

As highlighted in Chapter Five, access to the organisations and the key respondents in the organisations as well as their willingness to participate in the research posed to be a challenge. Three main reasons have been identified for this and include:

- The overall maturity of strategic responses of private healthcare funders to global climate change is still in early stages. The industry board suggested that the issue on global climate change is not important enough to warrant any strategic concern.

Industry Board: *“I don’t think that medical aid schemes and certainly the board have not looked at global climate change from a strategic point of view. Because the effects may only be revealed far down the line, it is too far away for schemes to seriously start thinking strategically about it. At this stage it is not material enough and it would not influence what we consider as essential benefits that should be included”.*

- Organisations may be concerned with the reputation risks associated with the interpretation of the data received and how this information would be perceived in the public domain.
- Global climate change, as a strategic concern, remains to pose levels of uncertainty and complexity as suggested in the literature. This perception is supported by the cynicism and vagueness of some of the responses provided by some respondents.

Despite some of the challenges encountered, the responses obtained are deemed to be of an acceptable quality.

## 6.2 Extent to which global climate change is considered a strategic issue and concern to private healthcare funders

The leading themes identified and described in Chapter Five suggest that there are varying factors that have motivated private healthcare funders to think about global climate change and the effect it would have on their organisations. These main themes can further be described under factors that are either external or internal to the organisation's operating environment. A summary of the analysis of these factors is provided in Table 4 below.

**Table 4: Factors Influencing Strategic Responses to Global Climate Change**

<b>External Business Environment Factors</b>	<b>Internal Business Environment Factors</b>
Catastrophes and Natural Disasters	Governing Strategies: mission and values
Changing burden of disease	Innovation Strategies
Global changing disease patterns	Corporate Social Responsibility and Sustainability

The literature brings to light that global climate change is an environmental issue that has actual or potential strategic impacts on many companies (Kolk & Pinkse, 2004). From a strategic overview, the literature identifies definitions of strategy. One of these definitions is that strategy is a unified, comprehensive and integrative plan designed to assure that the basic objectives of the enterprise are achieved (Glueck, 1976 In: Hax & Majluf, 1988). Under this definition, addressing global climate change stems from an organisational governing strategy of having at its

core a mission and values that speaks to addressing the ‘health needs and lifestyles’ of private healthcare funder’s members and in so doing, maintain ‘a good solvency ratio’.

Effect uncertainty occurs when there is an inability to predict what the impact will be on an organisation (Milliken, 1987; Aragon-Correa & Sharma, 2003). The private healthcare funders have identified global climate change as playing a role in changing patterns of disease and hence a change in the burden of disease. Despite having made these identifications, the quantum of the burden and the precise disease impacts remain uncertain strengthening the argument that global climate change continues to produce effect uncertainty. As stated by Company B and Company C: *“We have certainly considered climate change as a concern but the quantum of that is difficult to give”*. The Industry Board strengthens this notion by saying: *“We need to answer the question of what effect would global climate change / global warming have on disease distribution and therefore affect benefit design; and I am not sure that that question has been adequately answered”*.

### **6.3 Risks or threats posed to private healthcare funders in view of global climate change**

Table 5 presents the main risks that were identified from the interview process.

**Table 5: Risks Posed by Global Climate Change**

<b>Risk #1</b>	Change in burden of disease and implications on new product innovation, design and development (Industry Board, Company B, C, and D)
<b>Risk #2</b>	Change in burden of disease and implications on increased healthcare claims and costs for chronic, acute and lifestyle illnesses (Company A, B and C)
<b>Risk #3</b>	Changing weather patterns leading to natural catastrophes and disasters with a risk on human health (Company A)
<b>Risk #4</b>	Varying medical scheme demographic and geographic changes and a shift in target market for product initiatives (Company A,B,C and E)
<b>Risk #5</b>	Changing Consumer Demands (Company B,C and D)
<b>Risk #6</b>	Depletion of Resources (Company D)

When considering all of the above themes and their influences on the private healthcare organisations, it is evident that the manifestation of global climate change as risk translates into one that inevitably poses a financial threat to the bottom line. The respondent of Company E reiterated the fact that the key focus of their organisation is to maintain a manageable “*solvency ratio*”. Financial risk accompanied with susceptibility of human health and humans as resources and consumers of financial services and health insurance products exposes the medical aid funds to long term vulnerability. The analysis shows that risks associated with climate change could thus be described under three broad categories which include:

- Financial or Economic Risk
- Societal Risk
- Environmental Risk

These three categories identified strengthen the argument and notion of ‘Corporate Sustainability’. The ‘Corporate Sustainability’ framework identifies that the business sector has an economic, environmental and social responsibility and is also described as “profit, people and planet” (van Marrewijk, 2003). Global climate change, albeit in the context of the private healthcare insurance industry in South Africa, is thus seen to pose risks on all three levels.

Corporate Sustainability or CSR according to van Marrewijk (2003) refers to a company’s activities that demonstrate the inclusion of social and environmental concerns in business operations on five levels, and include:

- Providing welfare to society;
- Integrating social, ethical and ecological aspects into business operations and decision-making, provided it contributes to the financial bottom line;
- Balancing economic, social and ecological concerns beyond legal compliance and beyond profit considerations such that human potential, social responsibility and care for the planet are important;
- Well-balanced, functional solutions that create value in the economic, social and ecological realms of corporate performance; and
- Responsibility on all three levels is fully integrated and embedded in every aspect of the organisation which is aimed at contributing to the quality and continuation of life of every being and entity, now and in the future.

#### 6.4 Strategic opportunities which global climate change may offer private healthcare funders

The review of responses received to Research Question 3 is highlighted under one main theme being 'Commercial Opportunity'. All the organisations have identified in one way or another, the aspects of global climate change as a commercial opportunity. These opportunities have been expanded for clarity and understanding in Table 6.

**Table 6: Commercial Opportunities Presented by Global Climate Change**

	<i><b>Main Theme</b></i>	<i><b>Explanation</b></i>
<b><i>Commercial Opportunity #1</i></b>	Product Design and Product Offerings	Companies B, C, D and E have identified that there has been an increased awareness by consumers to 'green' issues. By virtue of consumers becoming more selective, there lies an opportunity in designing and promoting more holistic and 'green' products.
<b><i>Commercial Opportunity #2</i></b>	Marketing and Marketability Opportunities	Companies B, C, D and E recognize that increased awareness to 'green' issues creates a platform on which organisations could market themselves and their products. This heightened awareness crafts sensitivity in the selling space to attract new customers and new business.
<b><i>Commercial Opportunity #3</i></b>	Stakeholder Relationships	Companies A, B and C have identified that climate change and the focus on environmental issues are an opportunity to educate and get closer to their customers and strengthen those relationships by employing a 'perception of caring'.



<b>Commercial Opportunity #4</b>	Financial Opportunities	<p>Two main ideas identified by Company D have come to the fore regarding financial opportunities and climate change as strategy: (1) charging a premium price for products which are aligned to 'green' issues because the product adds value to their overall wellness; and (2) an increased awareness on 'living healthier lives' would have an eventual decrease on the cost of healthcare. The healthier people are the fewer claims that have to be paid out by the schemes. These two possibilities, although addressing two opposing types of mindset, have a similar outcome to the financial opportunities that exist.</p> <p>The Industry Board also suggests that a financial opportunity stems from an administrative efficiency perspective of some of the schemes moving towards on-line claims submissions and processing thereby reducing the cost to company.</p>
<b>Commercial opportunity #5</b>	Competitive Advantage	<p>Company B and C's respondent suggested that in this environment, a first mover advantage exists that would create some competitive advantage. However, because the barriers to entry into this space are very low, any competitive advantage will not be unique and would only last for a short period of time.</p>

By virtue of the definitions of strategy provided in the literature, the following could be said:

Strategy is a response to external opportunities and threats (Hax & Majluf, 1988).

An analysis of the results shows that the risks (Economic / Financial, Social and Environmental) and opportunities (Commercial) towards global climate change have been adequately identified and can be used by organisations in formulating and implementing strategies that sufficiently address the nature of the problem.

State Uncertainty exists in that the organisational environment remains unpredictable (Milliken, 1987; Aragon-Correa & Sharma, 2003). This uncertainty is

strengthened by the fact that some organisations (Industry Board and Company E) have not considered climate change at all as a strategic concern as well as having difficulty in identifying some of the risks and opportunities that exist. This coupled with the ever changing dynamics and regulatory framework within the environment, such as the talk around implementation of an NHI which is a greater concern to funding schemes, seems to make this type of uncertainty more pronounced.

## **6.5 Strategic responses of private healthcare funders to global climate change**

Despite the scepticism of the industry Board and Company E whose views of global climate change posturing a strategic concern to private healthcare funders, the research interviews were able to identify some of the key strategic imperatives that are currently being implemented or would be implemented in the future. However, not one of the organisations has an official plan of action in place, nor have they performed cost-benefit analyses from an actuarial and risk management perspectives which suggests that financial budgets for strategic implementation have yet to hit their radars. The dynamics of the private healthcare industry in South Africa and the regulatory framework, to which these organisations prescribe, make long-term strategising a more difficult concern as suggested by the Industry Board, Company A and Company E. Human resources and human capital does not seem to be a major concern to the organisations for strategy formulation and implementation.

Illustration of the main strategic imperatives and objectives of the private healthcare funders is provided in Table 7 under the key themes that have been identified from the interview process. The key themes that have been extracted include:

- Corporate Social Responsibility (CSR);
- Mitigation strategies; and
- Adaptation strategies.

**Table 7: Key Strategic Themes**

<b><i>Key Strategic Themes</i></b>		
<b><i>Corporate Social Responsibility</i></b>	<b><i>Mitigation Strategies</i></b>	<b><i>Adaptation Strategies</i></b>
<ul style="list-style-type: none"> <li>• Triple bottom line reporting (Company A, Company B and Company C)</li> <li>• Carbon footprint (Company D and Company E)</li> <li>• Community responsibility by 'doing the right thing' (Company A and Company E)</li> </ul>	<ul style="list-style-type: none"> <li>• Recycling and printing policies (Company A)</li> <li>• Energy efficiency (Company B and Company C)</li> </ul>	<ul style="list-style-type: none"> <li>• Disease management programs addressing lifestyle disease (Company B, Company C and Company D)</li> <li>• Flexible benefit structures that anticipate the unknowns (Company B and Company C)</li> <li>• Product design initiatives (Company B, Company C and Company D)</li> </ul>

According to the respondent for Company B and Company C, mitigation strategies towards climate change are seen to be far more difficult to implement as private healthcare funders operate in a services environment. The respondent states: *“In the healthcare funding business we do not really have to be careful of spewing carbon emissions or carbon footprint into the atmosphere because from an organisation perspective the service environment does not really affect that”*.

Response uncertainty is associated with attempts in understanding what response options are available to the organisation and what the consequences of a response choice are (Milliken, 1987; Aragon-Correa & Sharma, 2003). Given the facts of global climate change posing both State and Effect Uncertainty, leads to the belief that responses as a core strategic concern for private healthcare funders also remains uncertain. Although the interviews show that mitigation and adaptation strategies as well as strategies related to CSR are slowly being implemented, the outcome of these responses remains unclear. Facts regarding the different types of uncertainties that exist in the external environment of organisations, being effect, state and response uncertainties, makes for difficulty in strategic planning, strategy formulation and implementation. Thus, global climate change is seen to remain an issue of complexity to which there is no one specific and comprehensive strategy but rather a multitude of directions to which organisations can choose their response styles.

## 6.6 RDAP rating of strategic posture of private healthcare funders in view of responses to global climate change

The RDAP continuum scale has been used to frame the overall strategic postures of private healthcare funders in South Africa as a response to global climate change. The definitions of each of the ratings have been provided in the table below.

<b><i>Rating</i></b>	<b><i>Posture / Strategy</i></b>
<b><i>Reactive</i></b>	Deny responsibility that climate change would pose a strategic concern to the organisation; and would focus on risk mitigation if and when it arises.
<b><i>Defensive</i></b>	Admit responsibility that climate change poses a strategic concern to the organisation; but fight against having to change core business strategy in dealing with risks posed.
<b><i>Accommodative</i></b>	Accept responsibility that climate change poses a strategic concern; and consider having to address changes to core business strategy in view of a changing global climate to address risks and opportunities.
<b><i>Proactive</i></b>	Anticipate responsibility of global climate change as a strategic concern to the organisation; and anticipating addressing the risks of global climate change as well as exploring potential related opportunities.

Of the five interviews that were conducted in view of six organisations, only one organisation is deemed to fit directly into the ‘reactive posture’ – this being Company E. Company E has not seen climate change as a strategic concern to their organisation and on many levels do not understand how climate change poses risks, threats or opportunities that would require strategy formulation and implementation. Respondent from Company E has stated: “*Global warming is the*

*last thing that we have thought about. We certainly haven't looked at global warming from a strategic point of view".*

This is similar to the view of the Industry Board who suggests that many of their members, being the private healthcare funders, are positioned somewhere between 'reactive' and 'defensive'. They believe that some organisations may not have considered climate change as a strategic concern (reactive) while others may understand the influence of climate change on their organisations, but would certainly not see the need to change core business strategy because of climate change (defensive). The Industry Board states: *"Why would we want to make changes to 'core' business strategy when climate change is not affecting day-to-day activities. For closed schemes, because they tend to be more paternalistic about their members and their members lives, they may be more responsive but for open schemes, they are a healthcare insurance and you get what you pay for".*

It is the view of the respondent of Company B and Company C that many of the healthcare funders will remain "stuck" in the reactive – defensive phases because *"the nature of the problem is at early stages of discussion and would take a long time to reach a level of maturity for strategic change".*

Four of the organisations, Company A, B, C and D, are positioned in the 'accommodative phase'. These organisations are in tune with the fact that global climate change and other environmental issues pose risks and opportunities and have to adopt new strategic initiatives to address the matter. Whether the strategy

is mitigation, adaptation or pushed under the guise of Corporate Social Responsibility (CSR) remains a strategic discussion that needs to take place.

Respondents from Company B, C and D have proposed that they would like to see their organisations move into the ‘proactive’ strategic posture. In particular, respondent from Company B and C has said: *“We are not at any advanced stage of addressing this issue. We are at the thinking stage more than we are at the acting stage but in some by-products the acting is already happening. We are not regressive on the issue but we are certainly not where we should be. We certainly have left the station and we are on the right track by acknowledging it and bringing it in as a key test in a lot of what we do”* while respondent from Company D has said: *“I don’t think that we are taking on a leadership role but I think that we are looking for a leadership role; the right proactive role in the right proactive arena”*.

The literature states that strategy helps to marshal and allocate (...) an organisation’s (...) posture based on (...) anticipated changes in the environment (Quinn, 1998 In: Haugstad, 1999). The RDAP continuum model was able to allocate different organisations into different strategic postures. Although admittedly there are organisations that will be positioned in the ‘reactive’ or ‘defensive’ phases, some organisations accept responsibility that climate change poses a strategic concern, thus they fit within the ‘accommodative’ phase and are sourcing ways to explore strategies based on the opportunities and risks that have been identified.

The central role of strategy is not viewed as simply responding passively to the opportunities and threats presented by the external environment, but the organisation is continuously and actively adapting to meet the demands of a changing environment (Hax & Majluf, 1988). The results and analysis indicate that although there are some organisations that are thinking strategically about the impact of climate change and are deemed to be in the ‘accommodative phase’, the maturity of the issue is low and thus there is a need to be cautious of how organisations become proactive. As the respondent from Company D stated: *“If we take climate change as the major flag to fly, then we may be that horse in the race with our blinkers on, ignoring all the other horses, and we are going in one direction while everyone else, the industry and government regulation are on a different tangent”*.

The literature highlighted three types of uncertainty: State, Effect and Response Uncertainty (Milliken, 1987). By virtue of the definitions provided by Milliken (1987) and Aragon-Correa & Sharma (2003), global climate change as a strategic imperative to private healthcare funders fits into all three types of uncertainty.

When considering the interpretive / descriptive approach in Zan’s (1990) typology applied to strategy, strategy is seen as the ‘logic of the firm’s behaviour’. The case study approach to investigating the strategic response of private healthcare funders to global climate change and its application in a methodological context was seen to be successful in identifying the various interrelationships that exist between the components of the firm and the firm’s external business environment.



## CHAPTER SEVEN

### CONCLUSION AND RECOMMENDATIONS

#### 7.1 Conclusion

The research design and case study approach to the methodology with cross-analysis of the cases for comparative purposes is deemed to be appropriate as an exploratory, descriptive study despite the fact that the project does not provide an absolute conclusive result but rather a snapshot view at a single point in time.

The research report has met the objectives that were originally set out at the start; these being to determine if climate change poses a strategic concern to private healthcare funders in South Africa, identifying the risks and opportunities to the organisations in view of global climate change and framing the overall responses within the framework of the RDAP continuum scale.

Evidence from the results and analysis of interviews brings light to the fact that global climate change as a strategic concern to private healthcare funders remains a point of scepticism. Although there are organisations that have considered climate change as a strategic concern, either due to external or internal business environment factors, and as such categorise themselves as ‘accommodative’ under the prescribed framework, there are still organisations that have difficulty in

seeing how global climate change poses a strategic concern and will remain either 'reactive' or 'defensive' to the issue.

Risks and Opportunities related to global climate change and the health insurance industry have been explicitly identified. The subject matter is deemed to fit readily within the mantra of 'Corporate Sustainability' as climate change influences the factors that are economic, social and environmental. As such, the results described and analysed add value to the body of literature surrounding the subject of 'Corporate Sustainability' rather than the field of 'Corporate Strategy'.

The use of the RDAP continuum scale, adopted from a corporate social responsibility model and used as a strategic posture framework within this context, is deemed to be successful. The research study and the qualitative nature of the RDAP framework thus adds to the robustness of the model and its use in describing corporate strategies or postures and management of the interface between organisations and their natural environment. The fact that the model is based on a continuum rather than a static position, allows organisations the ability to monitor progression between the phases that have been explicitly defined.

Furthermore, the study showed that global climate change continues to remain an issue of complexity because the quantum of the burden on organisations is almost impossible to recognise. The nature of the problem and its uncertainty makes strategy formulation and implementation a difficult task and taking a 'proactive' stance is easier said than done.

## 7.2 Recommendations for Further Research

The newness of the context of the research topic, despite being top-of-mind in other industries and for other types of organisations, has created a platform for further research to be conducted.

Throughout the research process no maturity model describing the journey of formulating a strategic response to global climate change was encountered. Further research could therefore be undertaken with the intent of developing a maturity model for corporate strategy formulation and global climate change. This does not necessarily apply only within the context of the private healthcare industry but also within other service-oriented industries and contexts.

Other than the RDAP scale, other frameworks or models could be applied to the context of corporate responsiveness to global climate change and environmental concerns. By applying different frameworks or models, the strength in the argument for strategic responses by organisations would add to the current body of literature that exists.

This study proved that global climate change would most likely be positioned under the 'Corporate Sustainability' framework that exists in the literature. Since there is a great deal of work that is currently being done in this space, research could be performed using a different methodology. By exploring the subject matter through a different lens, such as surveys, further research could be conducted regarding the

relative importance of global climate change to organisations. This change in methodology could add value by quantifying the level of the burden of climate change at an organisational level.

## REFERENCES

Aragon-Correa, J.A., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*. 28 (1), 71 – 88.

Blashki, G., McMichael, T., & Karoly, D.J. (2007). Climate change and primary health care. *Australian Family Physician* 36 (12) 986 – 989.

Bonoma, T.V. (1985). Case Research in Marketing: Opportunities, Problems, and a Process. *Journal of Marketing Research*. Vol. XXII (May 1985), 199 – 208.

Clarkson, M.B.E. (1995). A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *Academy of Management Review* 20(1), 92 – 117.

Claussen, E. (2006). In: Hoffman, A. et al., (2006). Getting ahead of the curve: Corporate strategies that address climate change. Prepared for the PEW Centre on Global Climate Change. The University of Michigan. October 2006.

Costello, A. et al., (2009). Managing the health effects of climate change. *The Lancet*. 373, 1693 – 1733.

Doty, D.H. & Glick, W.H. (1994). Typologies as a unique form of theory building: Toward improved understanding and modelling. *Academy of Management Review* 19(2), 230 – 251.

Dul, J. and Hak, T. (2008). Case Study Methodology in Business Research. Elsevier Ltd.

Dunn, S. (2002). Down to Business on Climate Change: An Overview of Corporate Strategies. GMI 39, Autumn 2002.

Enkvist, P.A., Nauc  r, T., & Oppenheim, J.M. (2008). Business strategies for climate change. *The McKinsey Quarterly* 2008 (2).

Gillham, B. (2005). Research Interviewing – The range of techniques. New York.

Haines, A., Kovats, R.S., Campbell-Lendrum, D. & Corval  n, C. (2006). Climate change and human health: impacts, vulnerability and mitigation. *The Lancet*. 367, 2101 – 2109.

Hansel, G. (2009). *The retail sector's response to environmental sustainability*. Master of Business Administration Thesis, Gordon Institute of Business Science, University of Pretoria, Illovo, Johannesburg.

Haugstad, B. (1999). Strategy Theory – a Short Review of the Literature. KUNNE Nedtegnelse N 02/99, SINTEF Industrial Management.

Hax, A.C., and Majluf, N.S. (1988). The Concept of Strategy and the Strategy Formation Process. *INTERFACES* 18(3), 99 – 109.

Hoffman, A. et al., (2006). Getting ahead of the curve: Corporate strategies that address climate change. Prepared for the PEW Centre on Global Climate Change. The University of Michigan. October 2006.

Intergovernmental Panel on Climate Change (IPCC), (2007). Climate Change 2007: *Synthesis Report*. November 2007.

Jones, C.A., & Levy, D.L. (2007). North American Business Strategies Towards Climate Change. *European Management Journal*. 25(6), 428 – 440.

Kolk, A., & Mauser, A. (2002). The evolution of environmental management: from stage models to performance evaluation. *Business Strategy and the Environment* 11, 14 – 31.

Kolk, A., & Pinkse, J. (2005). Business Responses to Climate Change: Identifying Emergent Strategies. *California Management Review* (47) 3.

Kolk, A., & Pinkse, J. (2004). Market Strategies for Climate Change. *European Management Journal* 22 (3) 304 – 314.

Kruger, H. (2009, March 5). Re: Attaining affordability [Web log message]. Retrieved from <http://www.bhfglobal.com/attaining-affordability>.

Lim, G., Ahn, H., & Lee, H. (2005). Formulating strategies for stakeholder management: a case-based reasoning approach. *Expert Systems with Applications* 28. pp 831 – 840.

McGuire, L. (1997). Case studies: Story Telling or Scientific Research Method? *Case Study Methods*, Monash University, Melbourne.

Miller, A. (1998). Strategic Management. Third Edition. Irwin McGraw-Hill.

Milliken, F.J. (1987). Three Types of Perceived Uncertainty About the Environment: State, Effect, and Response Uncertainty. *Academy of Management Review*, 12(1), 133 – 143.

Negandhi, A.R., & Reimann, B.C. (1972). A Contingency Theory of Organisation Re-Examined in the Context of a Developing Country. *Academy of Management Journal*. June.



Perry, C. (2001). Case Research in Marketing. *The Marketing Review*. Westburn Publishers.

Rowley, J. (2002). Using Case Studies in Research. *Management Research News*. 25(1), 16 – 27.

Stern, N. (2006). What is the economics of climate change? *World Economics*, 7 (2).

United Nations (UN), (2009). Millenium Development Goals Report 2009. Department of Economic and Social Affairs of the United Nations. New York.

Van Der Woerd, F., Levy, D., & Begg, K. (2002). Corporate Responses to Climate Change: Introduction. GMI 39, Autumn 2002.

Van Marrewijk, M. (2003). Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion. *Journal of Business Ethics*. 44, 95 – 105.

World Health Organisation (WHO), (2009). Protecting health from climate change: connecting science, policy and people.

Yin, R.K. (2003). Case Study Research - Design and Methods, Applied Social Research Methods Series, Vol. 5, 3<sup>rd</sup> edition, Sage Publications.

Zan, L. (1990). Looking for theories in strategy studies. *Scan. J. Mgmt.* 6(2), 89 – 108.

Zikmund, W.G. (2003). *Business Research Methods*. 7<sup>th</sup> edition. South-Western Cengage Learning.

## **APPENDIX 1**

### **INTERVIEW DISCUSSION GUIDE**

#### **Question 1**

Have you considered global climate change as a strategic issue in your organisation? If YES, why? If NO, why not?

#### **Question 2**

What are the possible risks posed to your organisation in view of a changing global climate?

#### **Question 3**

Do you feel that global climate change could offer opportunities to the organisation from a strategic point of view?

#### **Question 4**

(A) How is the organisation responding from a strategic perspective to global climate change? What are you currently doing? And what do you intend to do in the future?

(B) Do you have a written plan of action? Has a cost-benefit analysis been performed for such a plan? Are there financial budgets for implementation of any plan? Have you got a timeline for strategic implementation of such a plan? And have you got the required resources example: human capital to address this issue?

### **Question 5**

Is there any other information you would like to offer regarding the subject of global climate change and your organisation?

## **APPENDIX 2**

### **INFORMED CONSENT**

I hereby confirm that I have been informed about the nature, conduct and benefits of this study. I have also received, read and understood the above written information regarding the interview.

I am aware that the results of the study will be processed in a research report that may be published.

I may, at any stage, without prejudice, withdraw my consent and participation in the study. I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study and will allow an audio recording of the interview.

**I AGREE / DO NOT AGREE\* that my name and contact details can be included in the global project database.**

**I WOULD LIKE TO HAVE FEEDBACK / WOULD NOT WANT TO HAVE FEEDBACK\* on the research study.**

Respondent's name \_\_\_\_\_ (please print)

Respondent's contact email \_\_\_\_\_ (please  
print)

Respondent's signature \_\_\_\_\_

Date \_\_\_\_\_

I, \_\_\_\_\_ (name of interviewer) herewith confirm that the  
above respondent has been informed fully about the nature, conduct and benefits  
of the study.

Interviewer's signature \_\_\_\_\_

Date \_\_\_\_\_

\* Delete the option that is not applicable to you.

## **APPENDIX 3**

### **VERBATIM RESPONSES FROM INTERVIEWS**

#### **Extent to which global climate change is considered a strategic issue and concern to private healthcare funders**

##### **Industry Board**

“I don’t think that medical aid schemes and certainly the board have not looked at global climate change from a strategic point of view. Because the effects may only be revealed far down the line, it is too far away for schemes to seriously start thinking strategically about it. It was thought of when we were revising the prescribed minimum benefits (PMBs) but at this stage it is not material enough and it would not influence what we consider as essential benefits that should be included”.

“We need to answer the first question and that is what effect would global climate change / global warming have on disease distribution and therefore affect benefit design; and I am not sure that that question has been adequately answered for schemes to take action on it”.

##### **Company A**

“It certainly has been raised that it is an issue; and how it was raised is that it would affect the insurance industry in general, where if you look at the increase in natural disasters, the insurance industry would be affected by that. The natural thing is that during those times, you would also have health consequences”.

“It is on our risk register but it is not listed in our top 15. There are actually more immediate problems but it has been raised as something that we could see happen as to how medical schemes could work in the future but it hasn’t been raised to a sufficient extent that it is something we are taking on-board now”.

#### Company B and Company C

“Has the scheme taken an impact or has it respectively looked at what the impact might be considering climate change and environmental issues and I think that it is really only recently that the schemes, if any, have started to look at it to that extent. We have certainly considered climate change as a concern but the quantum of that is difficult to give”.

“From a schemes perspective we are talking about it at disease level. We have thought through it and it was the advent of H1N1 and how that became a communicable disease so easily, made us think about how many other issues are communicable. And by virtue of climate change and environmental changes what other diseases are being created by climate change that we don’t understand yet and are potentially on the rising for us; and what diseases based on the change of temperatures and changes in environments where humans are not necessarily used to operating in those environments are then going to be more powerful and then humans become more susceptible to in those environments”.

“We are at a questioning stage and quite a deep questioning stage. We are seeking answers to the reasons of higher incidences of certain chronic disease and



climate change has to be seen as potentially one of the places that we are looking in and amongst others. It is that acute awareness of it that we do have”.

#### Company D

“We have definitely considered climate change as a strategic issue to the organisation. There are three pillars under which we frame this. The first is what we take as our governing strategy and that is the concept of making people healthier and enhancing and protecting their lives. Anywhere we look at an initiative that speaks into that type of mantra we are quite happy to go along with, explore it, run with it and see where it takes us. Climate change is a topic that fits naturally and easily into that mantra. There are clear systemic issues in the healthcare environment that are closely linked to the climate change issue and our longer term thinking - one of where we will be in five years and ten years time – is around the issues that will predominate and will affect people’s lives and health”.

“The second pillar falls within the sustainability argument and the line of thinking around corporate responsibility; it is not only about our key mission but it is also about being a responsible corporate citizen. There is an acknowledgement to corporate social responsibility (CSR) but it is not the number one driver. The number one driver is our fundamental view of improving the lives of our clients and members”.

“The third pillar is in the governing theme that runs in our innovation programmes that have an environmental flavour to it; and where we see innovation going”.

“Global climate change is not one of our top three strategic concerns at the moment but it is on the mantra within the sustainability type of mindset”.

#### Company E

“We have not at all seen climate change as a strategic issue. It has never come up. Because the scheme has to focus on having a good solvency ratio, we haven’t seen that global warming plays a role there. Although we haven’t thought of global warming, we do believe in people taking responsibility for their own actions, their own health, making the right health choices and with that obviously trying to be environmentally friendly in what we do and encourage our members to keep their own carbon footprint as low as possible. We know that government wants to implement a national health insurance (NHI) and so the goals to strategise in this industry are very short term and something like global warming is really not a priority”.

### **Risks or threats posed to private healthcare funders in view of global climate change**

#### Industry Board

“There are two issues. The first is the impact of global warming on disease distribution and therefore benefit design. Right now there is no significant burden of disease or very little might be known. This means that in terms of benefit design there will not be any material changes”.

“The second component relates to the industry being heavily involved in printing and publishing; and that means killing more trees. From this perspective there is an impact on climate change and it is a consideration, however it is not a serious consideration”.

“I don’t think the funding industry and the individual schemes have thought about it at these levels”.

#### Company A

“We haven’t gone into it in depth so it would really be those things that are intuitive. Because we are a restricted scheme, our demographic depends on what the industry that we serve looks like from that sense. We have an aging population inside the medical scheme environment; and so potentially changes in member demographic depending on what global economic changes take place and that would potentially create a different target market”.

“Then there is the clinical side, where there are healthcare claims for illnesses, and if global warming or climate change is going to change that pattern, then it would have an effect on us and change our burden of disease. At the moment our burden of disease relates largely to a number of areas: chronic illness, illnesses of lifestyle, genetic disorders and acute conditions. If climate change affects any of those, then there will be a change in the burden of disease and that will affect the scheme. We are certainly not anticipating any massive shifts in the short term. This is something that we certainly cannot ignore but it is not something that would change over

night. The only thing which could happen is if there was an increase in major weather patterns – which we have seen internationally – but we are not anticipating something major. We cannot re-insure for catastrophes so if there was a catastrophe which is related to climate change, we would not be able to re-insure for that”.

#### Company B and Company C

“The schemes are certainly seeing a change in the burden of disease and we are speculating that potentially one of the reasons may be a change in the environment that the scheme members are operating in. The certain geographies in which some of our members operate – being in either Company B or Company C – potentially have much higher incidences of impact with regards to global climate change. It is hard to tell if the changing burden of disease is directly related to climate change because we do not believe the research is strong enough for us to be able to link the syntaxes between the two areas but if taken the obvious, the obvious indicates that there must be an impact”.

“There is the element of how environmental issues impact the requirements of the members of the scheme with regards to product. For Company B, being an open scheme and having a varying set of members across many industries, makes it difficult to design products specific to certain demographics unlike that for Company C which is a restricted scheme and understands its demographic of members”.

“We are seeing a much younger, sicker group of members. The risks are associated to the bottom line with regards to increased spend which then effectively increases the cost of healthcare. This then obviously poses a risk and a vulnerability to the funds themselves”.

“Employers of our members in both our schemes are becoming or are being forced into the space of sustainability and triple bottom line reporting. The fact is that we service the people in those industries which mean that if they are becoming more acutely aware and if we are not in tune to them, it could become prohibitive of our schemes not being in those industries. Our clients will look more favourably on organisations that are more in tune with issues related to climate change”.

#### Company D

“In the same way we view the global incidences of Diabetes that pose a risk to the organisation or the rise of the HIV pandemic, the risks are essentially the costs – the healthcare and life related costs. The impact of carbon emissions in terms of respiratory disorders, for example, creates a reality that there is a link between climate related issues, health and healthcare costs but that is in the longer term. It will be a slow, gradual impact”.

“Some of the risk stems from a fabric of society issue that if we start to think about it in terms of depletion of resources and how that will affect our business function, then those kinds of challenges become quite interesting but they are not within our focus areas”.

“Another risk would be that if our organisation is seen as being the only one not in the fold on this issue while everyone else is playing the game which speaks to our consumer demand, then that poses a threat to our business”.

#### Company E

“Being an open scheme, anyone is free to join. If the average age continues to rise year-on-year because we do not bring on younger, healthier lives, then this poses a risk. This accompanied by annual price increases to healthcare as healthcare inflation is known to be higher than the normal inflation rate. A change in the burden of disease would definitely affect more lives and would increase the cost of health and therefore influence the bottom line but we do need to get some idea of the impact of global climate on healthcare. Not knowing all our members demographics such as where they work and in what industries they operate also poses a risk”.

### **Strategic opportunities which global climate change may offer private healthcare funders**

#### Industry Board

“I don’t believe that the opportunities are because of global warming. I do know that the funding industry has been thinking about moving towards electronic submissions of claims so that they move away from paper. It is a way for the schemes to improve efficiencies and reduce certain administrative costs. The opportunity is there because the schemes are looking at the cost efficiency side for

themselves in terms of the bottom line; it is not that if they save on or reduce paper that it would reduce global warming”.

#### Company A

“The schemes are too small and the industry is too small to start looking at major initiatives. From a scheme point of view it would maybe have to be looked at from the industry board and picked up at that level because we are all members of the industry board. If there is an opportunity, then it is an opportunity for the industry”.

“From the point of view of perception, there is an opportunity to show a perception of caring by giving information on the subject by writing articles. It gives an easier in to say: “Statistics show that average temperatures have risen by ‘X%’ over the last few years and so the incidence of disease is affected by it.” The opportunity is there from an education and caring perception”.

#### Company B and Company C

“An extent the schemes can really only look at this issue is the extent of product design because this is pretty much at the beginning and end strategically where the schemes stop. The awareness of the public around climate change and global climate issues is increasing. Anybody who is seen linking their products to a ‘green’ issue gets more awareness and more sensitivity in the selling space. It’s a marketability issue. If we address the issue by virtue of saying that we are sensitive to climate change and protecting the individual and potentially their families then there is some strategic advantage therein”.

“Because ‘triple bottom line’ reporting has become something that our clients are preaching and they have to be living it as much as they are preaching it, then their vendors of healthcare must be living it as well. There is an advantage to getting closer to our clients from this space and an advantage in attracting new business because of it”.

#### Company D

“There is a world of ‘more selective consumers’ which means that on the one extreme you can have the idea of charging more for a premium product on the premise that it does something good for them along the lines of ‘wellness’ and people will spend money on it; that poses a commercial opportunity. The other extreme is that in the longer term, if we can encourage our clients to do a little more with their lives, and we can have better healthcare costs than our competitors, and we are positioned well in that space, it would introduce a competitive advantage in line with healthcare insurance”.

“Following our ‘product development philosophy’, if our competitors had to come out with a product that they called the ‘green’ product, we would aspire to do something a little more fundamental. We would need the right opportunity that we felt was meaningful and could generate a long term impact and not just put a ‘green’ label on it to simply add a few small percentage points for growth. It is also hard for us to address climate change without addressing the other environmental issues and a product could be misconstrued as ‘green washing’”.



## Company E

“Because of the way the legislation is moving around medical schemes, the less the schemes will be able to differentiate themselves because they will become exactly the same. There is definitely an element of people who believe in looking after the environment and have a bigger issue with global warming so we could take advantage of that if we as a scheme said that we take global warming very seriously and this is what we are doing to minimise the impact. We may even be able to attract new customers or people from other schemes who have a positive perception of what we are doing and so there are definite marketing opportunities around the impact of global warming going forward”.

“If by merely saying about the way we run our business that we are environmentally friendly and our carbon footprint is almost zero and then introduce products that are a little bit more holistic in their offering, then there may be opportunities there”.

## **Strategic responses of private healthcare funders to global climate change**

### **Individual Company Findings**

#### Industry Board

“With medical schemes, the way the regulatory framework is, if the schemes are doing a six month plan, it is too long. That is the dynamics of this industry. If looking at the long term, 20 to 25 years, I would say that global climate change is not a priority right now to consider. Because the schemes are working from hand-

to-mouth from one year to the next, I don't think they are thinking of these kinds of issues now".

#### Company A

"From a 'sustainability' point of view we are trying to do the right thing in that we play our own role in preventing climate change – from recycling and printing on both sides of paper. To all these types of issues we have all the policies in place to make sure that we are doing the right thing and we look at it on an ongoing basis. This is reinforced by 'triple bottom line' reporting – that we are doing things from sustainability, social, ethical and transformational point of views. We cannot ignore the issues of sustainability and it has been factored into the equation so that we operate by trying to do as little damage as possible".

"From a scheme planning point of view, strategically, climate change has not entered the discussions enough to make any changes to our benefit design. We haven't got a 'climate change plan' and we haven't looked at an analysis to say that the burden of disease has changed significantly over the last few years as a result of climate change. We do however have the resources available should we have to drive something of this nature".

#### Company B and Company C

"The answer here is the same for the two schemes. We are not at any advanced stage of addressing this issue. We are at the thinking stage more than we are at the acting stage but in some by-products the acting is already happening. In our

disease management space, we are looking at impacting lifestyle diseases and changing the way people live and that goes down to the basic fact that water, sanitation, food and those issues, which are hugely impacted by climate change, that the education in that space is where we believe we have a reason to spend money because it manifests in the risk of being sicker or healthier”.

“We are responding by ensuring that we have benefit structures that are open enough to be able to anticipate the unknowns. In our closed scheme (Company C) benefit structure specifically, the benefits are rich on the risks portion and even more importantly is very rich in diagnostics in order to make sure that the things that are coming out of the wood-work at us can be dealt with”.

“In the healthcare funding business we do not really have to be careful of spewing carbon emissions or carbon footprint into the atmosphere because from an organisation perspective the service environment does not really affect that. We are however sensitive to and are in tune with related issues such as saving on electricity”.

“We do not have a written plan of action. I wouldn’t suggest that we have an esoteric plan of action but we have not subjugated it down to: “this is our climate change plan of action”. It doesn’t associate with budgets but the topic is something that permeates across our decision-making and thought processes but we don’t have an official plan in place”.

#### Company D

“There are really two streams that we follow – a product stream and a sustainability stream. Carbon footprint and related issues are very much addressed on the CSR and sustainability level. The environmental components of the sustainability issues are certainly being looked at by the sustainability team”.

“At the moment there is a lot of thought around product initiatives and it is on the agenda of the strategic issues that we are looking at crowded in the space in and amongst all of our other ones such as the NHI. It is probably one of about six headings that we are looking at for next year. We tend to operate in year-long product development cycles so if any of these themes start coming up in our product development cycle for the next year they will meet the requirements by having a written plan of action. In terms of a cost – benefit analysis, the answer would be a straightforward “No!”. From the perspective of resources, we do have the human resources to carry out initiatives and I know that we are investing in people”.

#### Company E

“Global warming is the last thing that we have thought about. We are doing small, touchy-feely things such as addressing carbon footprint because of corporate responsibility and we feel that we need to give back especially in areas where we have larger demographics. It is important for us to give back to our communities but it is more about feeling good about what we do and there really is no direct strategy driving that”.