<u>The Third Assessment Report:</u>
<u>Its relevance to shareholders in insurance companies</u>

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<u>The law</u>

A director has three relevant duties for present purposes. The ***fiduciary duty*** of directors requires them to act in good faith in the best interests of the company. They must act in the genuine belief that the relevant decision or action is in the company's interest (subjective) and the genuine belief must be able to be reasonably held (objective). The courts regard the directors' duty as being to act in the interests of present and future shareholders. Thus boards that fail to take account of long term risks such as climate change may be regarded as being in breach of their duty.

Directors must act with appropriate ***skill and care***. Although a director must satisfy minimum standards, the courts apply a subjective test and what can be reasonably expected of a director is measured by reference to the individual's own level of knowledge and experience.

Directors must also satisfy minimum standards of ***diligence***. Recent case law indicates that the courts require directors to meet a higher level of diligence in particular in relation to the installation and supervision of adequate management systems; systems to confirm that decision-makers possess the appropriate level of skills and that their performance is adequately monitored. Directors must also ensure that there are effective mechanisms to facilitate the collection and flow of information, such as changes in market conditions or regulatory frameworks, both into and within the company. The courts have held that not only is a board responsible for putting in place risk management and control systems to prevent severe losses, but also for ensuring that those systems continued to operate efficiently and that the individuals to whom duties had been delegated continued to carry them out effectively.

<u>Some of the facts</u>

Juxtaposed against these legal duties must be the latest information concerning climate change and the financial sector, which includes the following:

1. The IPCC TAR WG2 (Technical Summary, section 4.6, page 40, onwards) states:

> **Recent history has shown that weather-related losses can stress insurance companies to the point of impaired profitability, consumer price increases, withdrawal of coverage, and elevated demand for publicly funded compensation and relief.....There is high confidence [ie, 67-95% certainty] that climate change and anticipated changes in weather-related events that are perceived to be linked to climate change would increase actuarial uncertainty in risk assessment and thus in the functioning of markets...[T]he property/casualty insurance and reinsurance segments have greater sensitivity, and individual companies already have experienced catastrophe-related bankruptcies...**

and states, in the North America impacts' section (page 59):

> **Insurers' practices traditionally have been based primarily on historic climate experience; only recently have they begun to use models to predict future climate-related losses, so the potential for surprise is real.**

2. The IPCC TAR WG1 states that it is **90-99% certain** that in the 21st century, there will be[1]:

(1) higher maximum temperatures, more hot days and heat waves over nearly all land areas;

(2) higher (increasing) minimum temperatures, fewer cold days, frost days, [and cold waves[2]] over nearly all land areas; and

(3) more intense precipitation events over many areas.

3. The IPCC TAR WG2 sets out in respect of these 3 extreme events the following relevance to the insurance industry (verbatim extracts from Table TS-4 on page 39 of WG2 TS):

Extreme Phenomena	Relevance to Insurance sector	Relevant timescale	Sensitive Sectors/Activities	Sensitive Insurance Branches
higher maximum temperatures, more hot days and heat waves over nearly all land areas	Heat wave	Daily-weekly maximum	Electric reliability, human settlements	Health, life, property, business interruption
Ditto	Heat wave	Monthly-seasonal maximum	Forests (tree health), natural resources, agriculture, water resources, electricity demand and reliability, industry, health, tourism	Health, crop, business interruption
higher (increasing) minimum temperatures, fewer cold days, frost days, [and cold waves] over nearly all land areas	Frost, frost heave	Daily-monthly minimum	Agriculture, energy demand, health, transport, human settlements	Health, crop, property, business interruption, vehicle
more intense precipitation events over many areas	Flash flood	Hourly-daily maximum	Human settlements	Property, flood, vehicle, business interruption, life, health
Ditto	Flood, inundation, mudslide	Weekly-monthly maximum	Agriculture, forests, transport, water quality, human settlements, tourism	Property, flood, crop, marine, business interruption

4. In other words: the health, life, property, business interruption, crop, vehicle, flood and marine branches of the insurance industry are sensitive to 3 extreme future phenomena that are 90-99% certain to occur.

5. A recent report from the UK's Chartered Insurance Institute states that "[f]rom an initial review of four market sectors (tourism, construction, utilities and property), it is clear that climate change will alter these industries significantly in terms of demand and

[1] TAR WG1 also projects at 90-99% certainty: (4) reduced diurnal temperature range over most land areas; and (5) increase of heat index (i.e., combination of temperature and humidity that measures effects on human comfort) over many and areas. It also projects at **67-90% certainty:** (1) increased summer drying and associated risk of drought over most mid-latitude continental interiors; (2) increase in tropical cyclone peak wind intensities; and (3) increase in tropical cyclone mean and peak precipitation intensities.

[2] For some reason that I do not understand, cold waves were included in WG2, but not in WG1.

supply, and industries further up the supply chain, like insurance, would be well-advised to start considering what that could mean for them."

An example of a way forward

In the light of these (and other) facts, the key question is: what do the 3 duties of directors of insurance companies require of them?

On the assumption of a hypothetical insurance company which covers all sectors, it would seem initially reasonable for shareholders to ask the following of their directors, focusing only on those phenomena that the IPCC say are 90-99% certain:

(1) What specific assessment have you required to be made of the company's exposure to more heatwaves as a result of climate change? In particular, what assessment have you required to be made of the company's exposure as a result of the effects of heatwaves on electricity demand and reliability, human settlements, forests (tree health), natural resources, agriculture, water resources, industry, health and tourism?

(2) What specific assessment have you required to be made of the company's exposure to more frost and frost heave as a result of climate change? In particular, what assessment have you required to be made of the company's exposure as a result of the effects of frost and frost heave on agriculture, energy demand, health, transport and human settlements?

(3) What specific assessment have you required to be made of the company's exposure to the effects of more flash floods on human settlements as a result of climate change?

(4) What specific assessment have you required to be made of the company's exposure to more floods, inundations and mudslides as a result of climate change? In particular, what assessment have you required to be made of the company's exposure as a result thereof on agriculture, forests, transport, water quality, human settlements and tourism?

(5) If you have required any of the above assessments to be made, what were the results of such assessments? If not, do you not consider that your duties of care and skill, of diligence and your fiduciary duty require you to do so?

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July 2002
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