Who Can Insure Against the Climate?

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INSURANCE companies have been much in the news lately, and mostly not for the quality of their management. They have taken to issuing alarmist warnings about global warming and climate change. Although from some perspectives these are indeed natural risks—and therefore of potential concern to insurance practitioners—it will surprise many that insurers actually believe that climate processes take place on a time scale which is relevant to their planning horizon.

Led by large companies such as Insurance Australia Group (IAG) and Swiss Re, insurers have been running public seminars worldwide to parade the belief that recent sharp rises in claim payouts have been caused by an increasing frequency and severity of natural 'climate' events such as storms.

Efforts to convince the Australian public and politicians of the extent of the problem peaked in late June, when IAG joined the World Wide Fund for Nature (WWFN) in creating the Australian Climate Group and sponsoring a widely publicized marketing brochure on the perils of climate change. Tony Coleman, IAG's chief risk officer, went so far as to assert that it is a public responsibility to offer solutions to problems triggered by climate change.

About now, readers should be detecting the whiff of rat. A special interest political lobby group, the WWFN, has joined forces with an industry that has manifestly failed to manage its risks/claims balance skilfully. And, to boot, the recommendations for action from this combined lobby group turn out to be underpinned by science advice from government agencies which, themselves, have a major conflict of interest in the matter of climate change research.

Let us consider some of the key planks of the alarmist case for climate change.

Plank one. *The 0.6^0 C increase in global surface temperature measured over the 20th Century indicates global warming is occurring, with a rate of change which accelerated in the 1990s.*

First, the 0.6^0 C increase does not occur along a single trend line, but is rather a fitted average. Temperature indeed increased during the first part of the 20th century, then declined equally strongly between about 1940 to 1970, to finally increase again thereafter. This curve does not match the smoothly rising curve of increasing atmospheric carbon dioxide which is alleged to have caused the temperature increase.

Second, since about 1970, independent measures of atmospheric temperature have been available from weather balloons and satellites. These measures agree with each other, and disagree with the ground-based thermometer record, in showing very little temperature increase over the last three decades. This result contradicts virtually all the computer models, which predict that greenhouse gas warming should be accentuated in the atmosphere compared with the surface record.

Third, and last, the widely published graphs of an alleged dramatic increase in temperature in the late 20th century, used by the Intergovernmental Panel on Climate Change (IPCC) and based on papers by Michael Mann and his co-authors, has recently been shown to be based on flawed statistical analysis. The claims by these authors—that the late 20th Century saw the highest rate of temperature increase and the highest peak in temperature of the previous 1,000 years—lie in tatters.

Plank two. *Some computer scenarios indicate a temperature rise of between 1^0 and 6^0 C over the next 100 years, driven mainly by an assumed doubling of atmospheric carbon dioxide.*

First, it is important to understand that the effects of increasing atmospheric carbon dioxide content are uncertain, and may be as much as an order of magnitude less than is assumed by the computer models. The strength of various feedback effects is also uncertain.

But the most important point is that computer models of the state of climate in 100 years' time are viewed by their creators as *scenarios*. That is to say, they are statements of what 'might' happen, though in general without any attendant probability estimate. Only scenarios which seem 'reasonable' to their creators are ever reported publicly. The path to this reasonableness is littered with literally thousands of discarded computer runs which produce answers deemed to lie outside likely reality; for example, that carbon dioxide might *increase* and then, due to negative feedbacks, temperature *decrease*.

This notwithstanding, the general public, and apparently also scientific advisors to insurance companies, often treat these scenarios as firm *predictions*. Great and unnecessary alarm is thereby generated. As pointed out ▶

by the IPCC, the truth is rather that 'in climate research and modelling we should recognize that we are dealing with a coupled non-linear chaotic system, and therefore that long-term prediction of future climate states is not possible'.

In Australian terms, one might conclude that alarmist grass castles built upon computer modelling are destined to be consumed in the inevitable drought and bushfires which follow.

Plank three. *Climate change is here and now. Warming is human-caused, and we should act to prevent it.*

Of course 'climate change is here and now'. It always has been, always will be, and is overwhelmingly natural in origin.

The question as to whether a human-caused signal can be detected within Earth's varying climate is deeply controversial. Though few scientists doubt that a significant human impact occurs at a local level, for example around cities or areas cleared for intensive agriculture, any cumulative human signal is so far undetectable at a global level and, if present, is buried deeply in the noise of natural variation.

Considerable self-assurance is needed to argue that humans should seek to manage climate change. To argue for specific modifications in the absence of a measurable human signal, and in the face of vigorous scientific disagreement about the major causes of climate change, amounts to overweening hubris.

Plank four. *Global warming is responsible for more intense and/or more frequent extreme weather events, and caused an increase in the severity of the 2002 drought in Australia.*

Human-induced global climate change has not yet been demonstrated as a reality, as opposed to a computer-generated alarmist fear. To attribute regional weather events, including the current Australian drought, to global warming is therefore simply fanciful.

Droughts, floods, hailstorms and cyclones are natural weather events which human populations have always managed reactively. No empirical relationship has yet been observed between modest temperature changes of a degree or so and the frequency or intensity of such events.

For instance, a recent study in southern North America found 'no trends related to timing or duration of the hurricane season and geographic position of storms in the Caribbean Sea, Gulf of Mexico and tropical sector of the western North Atlantic Ocean' and also 'no significant trend in these variables and generally no association with them and the local ocean, hemispheric, and global temperatures'.

And as for computer models which predict such changes, they simply do not have the skill, and nor will they soon acquire it, to predict accurately the recurrence periods for natural events such as floods, cyclones and hailstorms. As several of the world's leading climate modellers observed in another recent paper, in *Nature*, 'we strongly agree that much more reliable regional climate simulations and analyses are needed', and that 'at present … such simulations are more aspiration than reality'.

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Of course, with expensive supercomputer labs to fund into the future, they would say that, wouldn't they? But the bottom line remains that the opinion of all expert modellers is that regional climate predictions remain beyond our current or likely near-future modelling capabilities.

It is clear that the barque *HMAS Alarmism*, constructed by the insurance industry from these and other timbers, is unseaworthy and doomed to founder, even when sailed across a welcoming pre-election sea of political correctness. Indeed, she is taking water so fast that I doubt that *Alarmism* will now survive even the next small wave. In making common cause with the WWF, the insurance industry is signalling that it sees being politically correct as more important than being scientifically correct. This is not a sound basis on which to plan the future of an important industry that, ultimately, stands or falls on the accuracy of its risk-assessment analyses.

In effect, global insurers appear to have been caught unawares by the occurrence of a perhaps unusual number of strong weather events which occurred in the late 20th Century. Probably even more important are the social changes which occurred over this same time span. For instance, a 2003 study from India showed that 'increasing damage due to tropical cyclones over Andrha Pradesh is attributable mainly to economic and demographic factors and not to any increase in frequency or intensity of cyclones'.

Trying to attribute individual weather events to climate change is a vain and transparent stratagem which aims to shift the blame for the insurance industry's own previous lack of careful research and planning. Governments and the public should firmly resist self-interested industry attempts to plunder their purses under the disguise of 'good corporate citizenship', 'sustainable development' or 'citizens against climate change'. And *HMAS Alarmism* should be allowed to sink quietly in peace.

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