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Stern Review
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Dear Mr Stern

Economics of Climate Change

You have invited evidence that would assist your review of the economics of climate change. As someone who was responsible for advising on climate change policy up to and including the Kyoto Protocol you can guess the number of presentations from which I have benefited over the last decade – not least from various US Administrations. I do not envy your task! Below are a few reflections from a member of the ‘audience’ that I hope may help.

It is easy to get a strong air of unreality, verging on feeling misled, when being shown economic models that extend more than a decade ahead. As I understand the economic argument there is no secure meaning to be attached to comparison of GDP figures separated by more than say 30 – 50 years. The same set of consumers cannot be in two epochs at once. For example, if you were to simply change one deflator rule for an equally defensible alternative you would get significantly divergent GDP series for the same production scenario over these long time frames. By all means chose a deflated GDP series as a surrogate exogenous driver for capital formation and patterns of consumption in emission models, but for heavens sake we should not take the number itself too seriously if it has been stretched over more than a decade! The economic cost of a greenhouse gas abatement programme is only the irreversible spend before the programme appears out of proportion! What must be equally important, but seldom addressed are the indicators of the political economy in these scenarios, such as employment rates.

It is not unusual for commentators to focus on the uncertainty in climate science, both from the perspective of wishing to do nothing or a great deal. It is far less frequent for commentators to note that climate change science has a predictable learning pattern. By 2030 if climate is worth worrying about, the evidence for worrying will be for all to see. The current pessimistic projections for climate change are so large that by 2030 contrarian explanations will have long been exhausted. Climate models themselves will be in an everyday trusted tool for inter-seasonal forecasting. While that is a tall order it is only consistent with underlying assumptions of economic growth through innovation embedded in the projections. Citizens in 2030 will know what they are doing, and where they are. The problem is to guess what they would have expected us to do. It is therefore very easy to exaggerate the cost of a commitment to abate greenhouse gas emissions. The biggest economic risk seems to be acquiring large scale infrastructure that becomes obsolete in the

2030 context. While it is easy to be sympathetic to the need for a narrative explaining how current actions fit into a grand plan extending over many decades that will save the planet, the reality is that very few decisions are fiercely irreversible. Even parties to the Kyoto Protocol (art 27) need only give one year's notice to leave it!

The economics of the demand side in energy models seems to be treated with little sophistication. This reflects that the models come originally from the energy supply side planning stable. The consequence is that they embed relatively few mechanisms for rapid change in the level of demand. Building services turnover ten times or so more frequently than the buildings within which they are housed. Energy, like any other intermediate product makes you richer if you can do without it, and we ought to be prepared for greater changes in demand patterns in some contexts. I attach a lecture I gave recently that elaborates the case. It is unashamedly qualitative in its analysis, but I hope illustrates the point.

The normal practice of International Law is to codify and consolidate practices that parties have already adopted but they wish to ensure do not regress. The fact that climate change treaties have instead taken to be vast multilateral bargaining arenas predictably accounts for the difficulties they often face, both in coming to agreement and then implementing the agreement at home. Diplomats do the job they are paid to do, but trying to advance environmental protection by devising ways for others to do the protecting is not likely to be the most effective method to tackle the problem at a multi-lateral level. In contrast to much other international law, (e.g. labour law) surprisingly little of the current legal machinery is there to facilitate effective unilateral action within a global context. Here I fear economists have not devoted enough energy. If country X is totally persuaded that something needs to be done to the value of some carbon tax, how does it do that most efficiently when other countries are not so persuaded? One bizarre consequence of current interventions is that a measure which expatriates a carbon intensive industry to another continent scores positively in meeting national targets when it has done absolutely nothing to improve the future climate.

I very much look forward to reading your conclusions

Yours sincerely

David Fisk