A study with erroneous claims about the impacts of global warming has finally been corrected

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A journal article claiming that moderate amounts of global warming have overall positive benefits has been quietly corrected after **Bob Ward** pointed out a number of errors. The updated analysis now claims "impacts are always negative", but the erroneous findings have been used to inform a recent report by the IPCC which still needs to be corrected. This episode underlines the need for greater transparency at academic journals and by researchers.

A correction to a paper quietly published by an economics journal last week has put pressure on the Intergovernmental Panel on Climate Change (IPCC) to amend a section of its new report that claimed that moderate amounts of global warming have overall positive benefits. The correction by Richard Tol, a professor of economics at the University of Sussex, has updated a paper he published in the *Journal of Economic Perspectives* in 2009 which collected together the results of studies of the economic impacts of climate change.

The original paper suggested that there were net beneficial impacts up to about 2.2 centigrade degrees of warming, and has been widely cited by climate change 'sceptics', including Viscount Ridley who used it as the basis of an article in *The Spectator* in October 2013 which claimed that "climate change has done more good than harm so far and is likely to continue doing so for most of this century".

However, after I raised concerns with Professor Tol and with the journal about a number of errors in the article, a correction was quietly posted on the journal's website last week. The correction points out that the original paper concluded that "there were net benefits of climate change associated with warming below about 2°C", but the updated analysis shows "impacts are always negative".

This is significant because a more recent paper by Professor Tol, which was published by the *Journal of Economic Dynamics and Control* in 2013 but contained many of the same errors as the 2009 paper, was used as the basis for a section on the economic damage caused by climate change in the report of the IPCC on 'Impacts, Adaptation and Vulnerability'.

The final version of the Summary for Policymakers of the IPCC report was published on 31 March, along with the underlying final drafts of the chapters. Section 10.9.2 of Chapter 10, on which Professor Tol is a Coordinating Lead Author, draws on his 2013 paper and states: "Climate change may be beneficial for moderate climate change but turn negative for greater warming". The chapter also includes Figure 10-1 which plots 20 of the 21 data points included in the correction by Professor Tol to his 2009 paper.

I have now drawn the attention of the IPCC to Professor Tol's correction and suggested that it needs to amend the text of Chapter 10 before the final version is published later this year. The amendment is also important to ensure that the error does not appear in the IPCC Synthesis Report, which is due to be published at the end of October. I have also asked Viscount Ridley, via Twitter, to amend his article in *The Spectator* now that Professor Tol has published a correction. Lord Ridley has so far refused.

These amendments begin to bring to a close a long battle I have been fighting since October 2013 to have corrections made in a number of papers by Professor ToI, who gained publicity in March after he announced that he had withdrawn from the team who were preparing the Summary for Policymakers of the IPCC report on 'Impacts, Adaptation and Vulnerability'. Professor ToI would not provide any assurances about publishing corrections when I first contacted him about the errors in October 2013, and only took steps to make amendments after I approached the journals directly in January 2014.

The response of the journals has been very variable and has revealed a surprising lack of commitment to basic transparency. A number of the data points in the papers were derived by Professor Tol aggregating the results of other studies. Despite numerous requests, Professor Tol has so far failed to make available the details of these aggregations so that I might check them for further errors. The journals have also failed to make the calculations available.

This lack of openness is perhaps surprising given the publicity generated last year by the admission by Carmen Reinhart and Kenneth Rogoff of errors in an influential 2010 paper. Perhaps it is time for economists to embrace a new spirit of openness when it comes to the publication of their research?

Note: This article gives the views of the author, and not the position of the British Politics and Policy blog, nor of the London School of Economics. Please read our comments policy before posting. Homepage image credit: Mikael Miettinen

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