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Climate change policy after Kyoto, blueprint for a realistic approach.

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McKibbin, Warwick J. and Peter J. Wilcoxen. ***Climate Change Policy after Kyoto, Blueprint for a Realistic Approach.*** **Washington, DC: Brookings Institution Press, USA, 2002, 133 pp., $49.95 cloth; $19.95 paper.**

Fashioning an effective international response to global warming has been a rocky road so far, and will continue to be in the future. In 1997, international negotiations produced the Kyoto agreement, aimed at getting countries to reduce their emissions of greenhouse gases. Given the vicissitudes of global and domestic politics, the implementation of Kyoto has been halting and contentious. Among many economists the Kyoto Protocol is something of an ugly swan. On the one hand, it has a number of design drawbacks, does not include countries of the developing world, and pays little attention to implementation. On the other hand, it does represent some action, and it contains "flexibility mechanisms," like CO_2 trading, that are near and dear to our hearts.

This short book is one of a number of efforts by economists to critique the agreement and offer improvements. Chapters 2–4 are excellent short summaries covering, respectively, "Science and Uncertainty," "The History of International Negotiations," and "Why the Kyoto Protocol is the Wrong Approach." They would be excellent for students who are being introduced to global warming and the vicissitudes of getting an effective international response. The subsequent analytical parts, in which the authors present and discuss their "hybrid" modification to the Kyoto agreement, will frustrate economists because this discussion treats the ramifications of the plan very lightly. However, having said this, it should be noted that this book is a policy brief meant to inform negotiators and policy makers about some basic ideas without getting bogged down in lots of details. The authors direct the reader toward their other published works where these details are discussed.

Their summary of the major failings of Kyoto is succinct. "It fails to address the deep uncertainties in climate change; it is designed around international permit trading, a politically unrealistic mechanism given the transfers of wealth that it could cause; it has no viable mechanism for enforcement; and it contains no realistic process for increasing participation by developing countries" (p. 59).

The authors are in the same quandary that many economists find themselves in: The best estimates so far appear to indicate that the costs of any substantial effort to reduce greenhouse gases in the developed economies are likely to be in excess of the long-run benefits of greenhouse gas reduction. How can we believe this, but still respond to our natural desires to do something about it now. Their formula is to opt for a "prudent" approach in which we abate emissions where it is possible to do so at "modest cost" (p. 61), or "when and where it is cost effective to do so" (p. 39). We can all believe in cost effectiveness, but what does "modest cost" mean?

The primary changes the authors would make to Kyoto are two: (*a*) do away with international trading in emission permits, substituting a set of individual country cap and trade programs in which a cap on "long-term" or "perpetual" emission permits is set at an internationally negotiated level such as, for example, the countries 1990 emissions; (*b*) add a provision whereby governments would be empowered to sell short-run (one-year) permits to polluters within their countries at a common, internationally agreed upon price (the "trigger price"). Individual firms would be in compliance as long as they held any combination of perpetual and temporary permits that totaled at least as much as their emissions. Countries would collect revenues equal to the number of temporary permits bought by firms in a year, times the trigger prices.

The authors are adamant in stressing the impracticality of an international trading program. It would require harmonizing legal systems more than is realistically possible; it would lead to excessive wealth transfers among countries; it would upset international monetary flows, and it would not result in cost savings as substantial as its advocates claim. One might argue whether a system of individual sales markets for temporary permits at an agreed upon international price is any more practical. In addition, as more and more trading programs are coming off the drawing boards, especially international trading schemes in, for example, Europe, this negative judgment may have been overtaken by events.

The trigger price scheme for selling short-run (one-year) permits amounts essentially to a greenhouse gas tax that would be applied to all emissions over the base, or permanent level. On the assumption that all countries establish internal trading plans, and the assumption that actual emissions exceed base or permanent levels, marginal abatement costs would be equalized at the trigger price among all sources in all countries.

The primary advantage claimed for this hybrid scheme is that it would allow countries to avoid uncertain abatement costs that turn out to be very high. Another advantage claimed for their proposal is that it would reduce the disincentives countries, especially developing countries, have for joining an international agreement. This is so because the trigger price scheme for temporary permits would limit the overall cost of joining, thus countries would not run the risk of curtailing growth. They also claim greater ease of enforcement, because a domestic constituency would develop in participating countries to enforce the program in order to protect the value of the perpetual permits, and also to be able to raise money from selling temporary permits.

The book is an excellent policy brief of their plan, good for policy makers and good also for economists (especially graduate students) who would like to consider the plan and try to work out some of its implications and ramifications. Perhaps the one added element that might have added to the book's value is some scenario analysis that would show how the hybrid approach they suggest would be better than any alternative.

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