DOES THE CHOICE OF POLICY MEASURES IN ANNEX B COUNTRIES INFLUENCE IMPACTS ON NON-ANNEX B COUNTRIES?

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Parties to the Framework Convention have begun to implement a variety of policies to achieve emission reductions required for the First Commitment Period under the Kyoto Protocol. Some of these policies use market-based instruments, such as emission trading, to achieve economy-wide emission reductions, while others use fiscal or regulatory measures to achieve reductions in specific sectors. This paper examines how the choice between market-based and sectoral policies affects the nature of spillover effects on non-Annex B countries.

There has been a ongoing debate, highlighted in both the Second and Third Assessment Reports, about the economic impacts on Annex B countries of policies and measures to reduce greenhouse gas emissions, with "top-down" models consistently finding that market-based policies entail costs to Annex B countries and "bottom-up" models arguing that by selecting fiscal and regulatory policies greenhouse gas emission reductions can provide economic benefits to Annex B countries.

Policies that reduce emissions in Annex B countries affect non-Annex B countries through trade linkages, and in particular by causing changes in the volume of imports and exports, capital flows and in the terms of trade between North and South. To determine whether the choice between economy-wide market based instruments and sectoral policies changes the nature of impacts on non-Annex B countries, several different scenarios for policy implementation in Annex B countries are analyzed using the MS-MRT model. We find that the most important linkages are between changes in energy use and the terms of trade for energy, so that, for example, policies that reduce Annex B oil imports produce negative impacts on oil-exporting countries, no matter whether the policies involve emission trading, fiscal measures, or regulatory policies. Policies that add some form of protection for domestic industries in Annex B countries increase the harm to non-Annex B countries. Whether an Annex B country incurs costs from implementing policies has almost nothing to do with whether the policies cause harm to non-Annex B countries. Which sectors and fuels are included in regulatory and fiscal policies does change the nature and incidence of impacts on non-Annex B countries.