

# Will Markets Direct Investments under the Kyoto Protocol?

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## Political aims and cultural ties may influence the placement of emission reduction projects under the Kyoto Protocol

Governments alone cannot finance enough investment to significantly reduce greenhouse gas emissions; private participation is essential. Under the Kyoto Protocol private investments in emission reduction can count toward a country's reduction obligations. And those investments can occur in partner countries where costs and emissions are low. But a new study by Larson and Breustedt suggests that political objectives and cultural ties influence the placement of emission reduction projects. If so, the lowest-cost projects may not be approved, and greenhouse abatement costs under the Kyoto Protocol are likely to be higher than predicted.

Costs have played an important part in negotiating implementation of the Kyoto Protocol. While developed countries produce by far the greatest share of emissions, they also face higher costs of abatement. To obtain the greatest reduction in global emissions, "flexibility mechanisms" allow a country nearing its domestic emissions limit to get credit for reducing emissions in any of 36 developing and transition economies. Investors would be motivated by lower costs in developing countries, host countries would benefit from greater investment, and global abatement costs would be substantially lowered.

Given the complexity of the issues involved, treaty participants agreed to launch pilot projects before treaty ratification. The first of these bilateral projects, referred to as "activities implemented jointly" (AIJ), began in 1992. Data are available on the projects approved in the first 10 years, allowing examination of the outcomes of investor application and national approval processes.

How much do AIJ investments differ from those that would have occurred

without the government approval process? Qualitative studies of such processes found that they often include panels with representatives from several government agencies, suggesting that they are likely to be subject to agency mandates and objectives. That literature indicates that abatement cost was just one of several factors affecting approval of AIJ projects.

Building on those precedents, the study models investor decisions and government approval in the AIJ system. In the model the investor's choice of host country is influenced by the investment climate and various governance attributes of host countries and by investor and host countries' commitment to climate change. For the government approval process, the authors assume that some of the national policy objectives that influence bilateral aid also affect approval of AIJ host countries.

If this is true, many aid recipient countries also should be host to AIJ projects. To compare the aid and AIJ approval processes, the authors model donor country aid as a product of several recipient country characteristics—need, size, democratic institutions, civil order, and bureaucratic efficiency—and two variables that reflect the investor country's desire to influence that partner.

The data and different versions of the model are consistent with the hypothesis that donor countries prefer projects that help achieve policy objectives also pursued through bilateral aid. All but 5 of the 147 AIJ projects involved investor and recipient countries that also were partners in bilateral aid. And the analysis shows a strong and significant association between bilateral aid flows and AIJ investments, both in models that consider whether a donor-host pair had any AIJ projects and in those that count the number of joint projects.

This finding of such a clear and strong association suggests that earlier predictions of the effects of the Kyoto Protocol may be optimistic. To

minimize abatement costs and thus maximize emission reduction, objective criteria are needed for project approval that guarantee quality but omit political objectives. Theories of political economy would suggest, perhaps somewhat more realistically, that country preferences be explicitly stated to allow potential investors to accurately account for them.

Another interpretation of the results is that preferences of approving agencies reflect deeper bilateral relationships, or cultural ties that could also influence investor choice. Said differently, deep-seated cultural ties may influence bilateral policy more generally, including aid decisions and AIJ approvals. Such ties may also be important for bilateral investments such as those under the AIJ program, since studies of bilateral ties related to language, culture, and history indicate lower transaction costs where bilateral interactions are frequent and long-lasting.

For these reasons the analysis may be observing the results of private and public decisions: private investors responding to lower transaction costs and risks and public agents responding to established sociopolitical ties and preferences. If this is so, the hurdles to bilateral financing are higher and greater effort is required to find open and transparent ways to contain transaction costs.

With the approval processes, panels, and channels with host countries established, countries may be inclined to retain the institutions built during the pilot phase. Under the Kyoto Protocol, Clean Development Mechanisms rather than the AIJ will be implemented, and binding regulatory constraints will govern them in some countries. Nonetheless, the study suggests that countries need to consider the effects of the AIJ institutions on both costs and abatement in deciding on new mechanisms and approval processes.

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