Intellectual property rights protection and the international transfer of low-carbon technologies*

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ABSTRACT

We examine the effect of intellectual property rights regime on cross-country transfer of low-carbon technologies. We merge a new dataset that combines country-pair-level data on international trade and foreign direct investment in low-carbon technologies with country-level data on intellectual property rights protection. Our dataset covers 80 developing and 28 developed countries observed yearly between 2003 and 2010. Our main finding is that the effect of IPR protection depends on three factors: (i) the technology considered, (ii) the market channel used for the transfer, and (iii) the level of absorptive capacities of the recipient country. When significant, the impact of IPR protection on the import of goods and inward FDI is positive for developed countries with high absorptive capacities and mixed for other countries. The important heterogeneity we find regarding the effect of intellectual property rights protection suggests that low-carbon technologies shall be examined separately during the climate negotiations.

Keywords: Climate change, Technology transfer, Intellectual property rights, International trade, Foreign direct investment.

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