

An Employment Double Dividend and Welfare in a North-South Model of Trade With or Without International Policy Coordination

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Abstract

Should developed and developing countries reduce emissions in complete harmony? To answer this question, we develop a simple North-South model of trade in which homogeneous firms in the South produce intermediate goods, heterogeneous firms in the North produce and export final goods, and pollution travels across countries. Using our framework, we first analytically show that without international policy coordination, Northern environmental policy may or may not deliver an employment double dividend in the North but has no effect on the aggregate employment and emissions in the South. In contrast, Southern environmental policy never delivers an employment double dividend in both countries. With international policy coordination, common environmental policy may or may not deliver an employment double dividend in both countries. Whether the Northern, Southern, and common environmental policy improve welfare is uncertain across all cases despite different underlying forces with or without international policy coordination. We then numerically show that, to maximize world welfare, the North must impose much stricter environmental regulations than the South. In a baseline scenario, unless both countries initially regulate to some extent, international policy coordination is ineffective. When people suffer more badly from pollution as it accumulates, however, international policy coordination can be effective. This is more likely when the level of transboundary pollution is high.

Keywords: Employment Double Dividend; International Policy Coordination; Welfare

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