The challenge of global carbon emissions will be unbearable if India undertakes industrial relocation from China

Topic: Special Session: IO Analysis for Just Transition: Linking Economic Structures and Social Inequality (1) Author: Xiaoxu Zhang Co-Authors: Kang Lin, Kunfu ZHU

With the rise of labor costs in China, constraints on resources and environment, and ongoing geopolitical conflicts, India has emerged as the most likely candidate to undertake Chinaâ€[™]s industrial relocation. This shift could undermine global efforts to cut carbon emissions. However, ex ante measurement of the environmental effects of such industrial relocation is poorly understood. Here we show that shifting the iPhone production from China to India doubles the productionâ€[™]s carbon footprint. Overall, Indiaâ€[™]s undertaking of Chinaâ€[™]s industrial relocation will lead to increased carbon emissions and reduced global economic growth. The carbon burden surpasses the emission reductions achieved by the EU since the Copenhagen Climate Conference. At the sector level, the computer, basic metals, electronic equipment, and automotive sectors are the largest sources of incremental carbon emissions, ensuring these sectors are not substituted by India and promoting technological progress in developing countries are essential to offset the extra emissions.