

Block structural path analysis in a multiregional input-output system: An environmental application to Asia Pacific region

Topic: Environmental IO models 10

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Growing regional inequality and environmental degradation associated with interregional trade in Asia Pacific Area has been considered one of the major barriers in achieving sustainable development. Decomposition of economic structure at the regional level can help analyze these problems. This study applies Block Structural Path Analysis to the Asia Pacific 10 countries input-output model. The novelty of this paper is three-fold. First, we categorize the transfer of influences between two regions into hierarchical ranks which are based on combination theory. Second, we define the roles played by regions, i.e. the pushing role, the pulling role and the relay role. Third, we extend the application of Block Structural Path Analysis to environmental analysis.