

Hypothetical extractions from a global perspective

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Author: Erik DIETZENBACHER

Co-Authors: Bob van Burken

The hypothetical extraction method (HEM) has been widely used to measure interindustry linkages and the importance of industries. HEM considers the hypothetical situation in which a certain industry is no longer operational. Using the input-output framework, it then calculates the outputs in the entire economy that are necessary for the original final demands. The difference between the original outputs and the reduced outputs in the hypothetical situation are a measure of the linkages of the deleted industry. HEM was developed for national economies, using national input-output tables. When performing HEM it is important that other things remain the same in order to single out the actual effect of the extraction. At the national level this means that the remaining industries still receive the inputs they require. It is therefore assumed (often implicitly) that the input requirements that were originally provided by the extracted industry are met by additional imports in the post-extraction situation. Applying HEM to global multiregional input-output tables, however, causes serious problems. The assumption to import the required inputs (that were originally provided by the “now “ extracted industry) from outside “the system”, is no longer possible. It would assume importing from Mars. All this implies that the standard HEM, as developed for a national context, cannot be transferred straightforwardly to a global context and needs to be adapted. In this paper, we provide such an adaptation, the global extraction method (GEM).