

# Input-Output Analysis: An Impact Study

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The objective of this paper is to provide quantitative evidence of the impacts of input-output analysis. Bibliometric methods are used to identify which scientific disciplines have been impacted by input-output analysis most intensively, and to identify shifts in this pattern over time.

Input-output economics has virtually disappeared from the pages of leading mainstream economic journals since the late 1980s. Understandably, this has led to a rather unfavorable position of input-output analysis regarding its ability to remain well-represented in economics departments and its chances of obtaining funds from research councils. Simultaneously, however, other disciplines (such as industrial ecology and operations management) seem to have embraced input-output analysis as a useful toolbox. Consequently, debates emerged concerning the future of input-output within the community of input-output scholars. Many of these mainly addressed the question which types of questions could and should be answered by input-output analysis. Therefore, it might be interesting to construct statistics based on bibliographic information to find out what kind of studies the input-output community contributed and in what fields it had its strongest impacts.

The citations data required for this study are taken from a recently published, continuously updated, and wide-ranging bibliographic database, Scopus. The data allow for an analysis of the period 1996-2005. In the first step, the “body of input-output literature” (IO-LIT) will be identified. To this end, we first find the authors of articles (ESR-LIT) that appeared in the input-output journal *Economic Systems Research*, 1996-2005. Besides these articles, IO-LIT consists of those articles that appeared in other journals (in the same period) and (i) cited at least one of the authors of articles in ESR-LIT, and (ii) the titles or abstracts of which contain the terms “input-output”, “interindustry” or “intersectoral”. IO-LIT allows us to quantify the *direct* influence of input-output analysis on various scientific fields and academic journals. Next, we construct a set of articles that do not belong to IO-LIT, but cite one or more articles in IO-LIT. We assume that the articles in this set (IO-CIT) benefited from the body of input-output literature. Hence, the fields to which these articles correspond and the journals in which these appeared enjoyed an *indirect* influence of input-output analysis.

We compare the extents to which ESR-LIT, IO-LIT and IO-CIT contributed to several fields of study, by using keyword analysis and the opinions of experts. We also consider the impact of IO-LIT and IO-CIT on academic journals. Finally, we investigate whether these impacts have shifted over time, as far as the short span of time covered by our data allows us.