

Development of from-whom-to-whom Financial Tables and Extension of Social Accounting Matrix

Topic: Input-Output Theory and Methodology (1)

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This paper asks how input-output analysis can be extended to financial activities and how financial stocks and flows can be consistently incorporated into an international social accounting matrix in order to analyze the effects of monetary policy. To address this question, we develop from-whom-to-whom financial stock tables and apply input-output techniques by treating central banks as an exogenous sector. We then derive corresponding from-whom-to-whom flow tables from the stock tables and examine alternative ways of representing these flows within the social accounting matrix framework.

The empirical analysis is based on newly compiled from-whom-to-whom financial stock tables for the United States, the euro area, and Japan. These national tables are combined into an international from-whom-to-whom financial stock table. We construct tables for 2000 and 2004 and compare them to identify structural changes in domestic and international capital movements by calculating each sector's power of dispersion.

The main novelty of this study is threefold. First, it provides a consistent international from-whom-to-whom financial stock framework that allows the application of input-output analysis to financial activities and monetary policy transmission. Second, it proposes a systematic procedure to derive flow tables from stock tables and to embed them into a social accounting matrix. Third, it develops a method to record negative financial flows as positive entries in the matrix, which makes it possible to extend the social accounting matrix to include financial flows in addition to production, income, expenditure, and capital formation. This extended framework offers a new tool for analyzing the structural interdependence between real and financial sectors at the international level.