

Do the new SNA 2008 concepts undermine Environmental Input Output Analysis?

Topic: CGE and econometric input-output modeling IV

Author: Maarten van Rossum

Co-Authors: Bram Edens, Roel Delahaye, Rutger Hoekstra, Sjoerd Schenau

The new SNA guidelines will lead to changes in the recording of global manufacturing. These changes are the result of revised recommendations regarding the treatment of goods sent abroad for processing and merchanting. The 1993 SNA stipulated that exports and imports of goods should be recorded at the time in which ownership passes from a resident to a non-resident unit. However it noted possible exceptions to the ownership principle: merchanting, and goods sent abroad for processing. With the 2008 SNA these exceptions have been dropped in favour of the application of pure ownership criteria. The 2008 SNA recommendations are to a large extent motivated by the empirical realities of a globalising world in which it becomes increasingly difficult to monitor production processes.

These recommendations not only have major implications for the supply and use tables of the National Accounts (from 'gross' flows of goods to 'net' flows of services in case of processing) , but a fortiori also call into question how this affects input-output (IO) analysis. Industries become less homogeneous by implementing the new 2008 SNA concepts. Industries could include both processors (service suppliers) as well as non-processors (goods suppliers). So industries becomes less homogeneous. As a result the emission-factor changes and this will have consequences for IO analysis.

This paper discusses the theoretical consequences of the new SNA 2008 guidelines for IO analysis but also the empirical consequences. The theoretical problems related to the new SNA2008 guidelines for IO analysis are discussed first. Secondly, by comparing the outcomes of IO analysis using both IO tables based on SNA 2008 and SNA 1993 we will test if and to what extent these new guidelines are a significant problem for IO analysis in practice.