TITLE: METHODOLOGY FOR THE CONSTRUCTION OF AN INTERNATIONAL SUPPLY-USE TABLE

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ABSTRACT:

The EU-funded EXIOPOL project has as its main objective to create an international environmentally extended input-output database. Instead of focusing on symmetric input-output tables, the core of the database will be formed by trade-linked rectangular supply and use tables. Supply-Use Tables (SUTs) have not yet been used as framework in international databases even though they are superior for statistical reasons. Trade-linking the tables is essential for obtaining a correct estimate of the actual environmental impacts of international production and consumption. Analyses based on these tables will attribute both direct and indirect environmental impacts to an internationally traded product or service, irrespective of its stage in the production chain in which they are created.   To provide an economically sound database, this paper describes a non-survey method to construct, alternatively, an international supply table or an international use table. Due to the valuation layers of taxes, subsidies, and trade and transport margins that are added to products when they are traded internationally, import-use tables and export-supply tables cannot be trade-linked simultaneously. Both alternative trade-linking processes consist of two main steps. The first step is the split-up of the import-use table (or export-supply table) into bilateral use (or supply) tables, using trade ratios derived from an import (or export) trade database. The second step is to reconcile the international commodity trade flows obtained from trade-linking with information in the national SUTs by applying a generalized RAS method.   This methodology is tested on a limited set of countries, resulting in the first trade-linked international supply tables and international use tables. The two alternative international tables obtained by trade-linking the import-use tables and the export-supply tables are analyzed to interpret any differences.