Overview of the Eora World MRIO Project

Topic: World input-output modeling and databases

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The Eora multi-region IO table (MRIO) is a new high-resolution table that records the bilateral flows between 15,000 sectors in 187 countries. Such a comprehensive, high-resolution model is advantageous for analysis and implementation of sustainability policy. This paper provides an overview of how the Eora IO table was built. A custom data processing language was developed to read, aggregate, disaggregate, and translate raw data from a number of government sources into a harmonized tensor. These raw data often conflict and do not result in a balanced matrix. A custom optimization algorithm was created to reconcile conflicting data and balance the table. Building and balancing the Eora MRIO is computationally intensive: it requires approximately 20 hours of compute time per data year on a cluster with 66 cores, 600GB of RAM and 15Tb of storage. This overview of the Eora MRIO will be presented by Prof. Manfred Lenzen on behalf of the authors.