Supply and Use Tables and Input-Output Tables

Principles and Guidelines - Day two, Session two

United Nations Economic Commission for Europe (UNECE)
Group of Experts on National Accounts
Special Session for Eastern Europe, Caucasus and Central Asia (EECCA) and South East Europe (SEE) countries

3-5 October 2022, Geneva, online

All views expressed reflect those of the author / presenter only and not those of the ONS

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Supply and Use Tables and Input-Output Tables
Principles and Guidelines

An overview

• Compilation of IOTs
  • Some key principles and guidelines
• An overview of the compilation schematic
• Brief feedback on the UNECE SUTs / IOTs questionnaire
• Any questions?
Compilation of IOTs

Some key principles and guidelines

- SUTs / IOTs should be at the heart of National Accounts
  - Integration leads to better quality, coherency and consistency.
- Production of SUTs comes first, then the production of IOTs.
- Align with annual production of SUTs:
  - Investment is up front.
  - Handling negatives and review of assumptions thereafter.
- The most frequently used methods to derive IOTs are:
  - Model A (Product by Product) IOTs using the product technology assumption.
  - Model D (Industry by Industry) IOTs using the fixed product sales structure assumption.
  - Hybrid - Mix of technologies usually chosen to avoid having any negatives.

We will touch on many of these issues during the Special Session.

UN Handbook on Supply and Use Tables and Input-Output Tables with Extensions and Applications
An overview of the compilation schematic integrating Supply and Use Tables and Input-Output Tables (“H-Approach”)

Supply and Use Tables

Current prices

<table>
<thead>
<tr>
<th>Supply</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>I</td>
</tr>
<tr>
<td>Product</td>
<td>Industry</td>
</tr>
</tbody>
</table>

Previous years’ prices

<table>
<thead>
<tr>
<th>Supply</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>I</td>
</tr>
<tr>
<td>Product</td>
<td>Industry</td>
</tr>
</tbody>
</table>

Reallocate:
- Taxes and subsidies on products
- Trade and transport margins
- Imports of goods and services

PY rate x volume change

Deflation

Taxes/subsidies split at each stage

Deflation (with domestic/export split)

Other supporting analyses e.g., HHFGe deflation by consumer price indices

Supply and Use Tables

Purchasers’ prices

Producers’ prices

Basic prices

Input-Output Tables

Type of tables (assumptions)

Product or industry or hybrid

P x P Tables use Technology

I x I Tables use Fixed sales structure

P or I or Hybrid

P sales or I sales

Leontief Inverse, multipliers, etc.

Compiled by Sanjiv Mahajan
June 2009
Brief feedback on the UNECE SUTs / IOTs questionnaire

Based on 18 country responses (no two countries are exactly the same)

- 13 countries compile IOTs:
  - 11 countries derive IOTs from SUTs and four plan to start.

- Compilation frequency:
  - Six countries compile on an annual basis.
  - Five on a five-yearly basis, one on a three-yearly basis and one on an adhoc basis.

- Those compiling annual SUTs have a recent IOTs reference year, e.g., 2019 or 2020.

- Six countries utilise an IT-based balancing tool.
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Brief feedback on the UNECE SUTs / IOTs questionnaire

Challenges

- Lack of tools for SUTs / IOTs conversion
- Lack of reliable source data, e.g., IC, margins, cif / fob
- Maintaining regularity of production
- Lack of experts
- Linking quadrants of the table
- Commodity structures of output and IC for some industries
- Coding of goods and services
- Negative values
- Lack of cooperation with Government and private sector

Thank you all for responding to the UNECE Questionnaire.
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Any questions?

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