The Dutch SUT-system

Marcel Pommée
Researcher National Accounts
• Why compile a SUT?
• Characteristics of the Dutch SUT
• Compilation cycle
• Automation with ‘machines’
• Challenges ahead
Why compile a SUT?

• SUT is a comprehensive NA-framework with
  • common structure and classification
  • accounting identities
• Make best use of all data available
• More easy to identify and solve inconstistencies at detailed level
• Strengths and weaknesses of data become apparent
  • action to improve weaknesses
• Outcome gives coherent picture of the economy
• Learning element for statisticians
Characteristics of the Dutch SUT

- Detail: industries (120), commodities (200, but 600 for final year)
- Focus on year-on-year changes (afterwards seasonal adjustment)
- Simultaneous balancing of current and constant prices (6-pack)
- Data gaps filled with assumptions and extrapolations
Characteristics of the Dutch SUT

Supply table

<table>
<thead>
<tr>
<th>Domestic production basic prices</th>
<th>Imports cif</th>
<th>Valuation Taxes/subsidies on products trade and transport margins</th>
<th>Total supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total output</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use table

<table>
<thead>
<tr>
<th>Intermediate consumption Purchasers prices excl. VAT</th>
<th>Final expenditure</th>
<th>Total use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non deductible VAT</td>
<td>Non deductible VAT</td>
<td></td>
</tr>
<tr>
<td>Value added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total output</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Characteristics of the Dutch SUT

Simultaneous balancing of the supply and use table

- Supply and Use Table of year t-1 in prices of t-1
- Supply and Use Table of year t in prices of t-1
- Supply and Use Table of year t in prices of t

Volume indices

Price indices
Compilation cycle

- **Quarterly data**
  - Flash estimates (t+45 and t+30 days)
  - Regular estimates (t+90 days)

- **Annual data**
  - Provisional data (t+6 months)
  - Improved provisional data (t+18 months)
  - Final data (t+30 months)

- **Revisions**
Automation with ‘machines’

- Only semi-automatic integration
  - Major problems tackled manually
  - Small problems resolved through automation

- Balancing machine (quadratic optimization model)
  - Base period (t-1); balanced
  - Current period (t); unbalanced data in current and constant prices
  - Model maintains price and volume changes as much as possible

- Hard and soft constraints
  - Supply is equal to use
  - Preserve i/o-ratios by branches of industry
  - Fixation of variables
  - Weighting of variables based on quality of datasource
  - Specific relations (import and re-exports, building materials and construction)
Automation with ‘machines’

• Machines for different purposes:
  • Balancing machine: balancing single SUT
  • Quarterly machine: rebasing years and aligning quarters
  • Time-series machine: rebasing time-series

• Advantages:
  • Efficiency gains
  • More structured process
  • More quality (transparency, consistency)
Challenges ahead

• Major (benchmark) revisions every 5 years

• From 3 to 2 annual estimates; speeding up final year

• Reducing revisions, especially between flash and regular / final estimates

• Further development of very first estimate (t+30)?
Production proces - Dutch National Accounts

Marcel Pommée
Researcher National Accounts