

Danish Supply and Use tables



Compiling annual supply and use tables: Definition

SUPPLY		USE				
Danish Production	Import	Intermediate Production	Private Consumption	Government Consumption	GFCF	Export
130 lada		130 lada	72 grupper	30 grupper	10 grupper	

- SUT as an **fully integrated** part of the NA compiling process

- Aggregated balanced SUT's = Totals in the SNA Accounts "Account for Goods and services" and "Production Account"

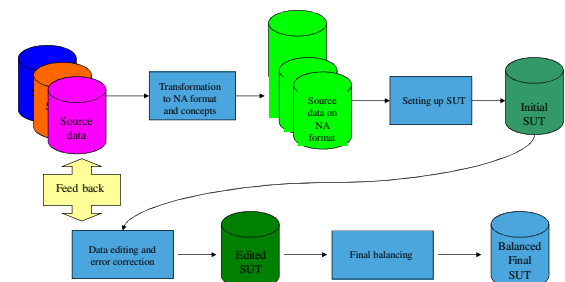


Purpose etc.

- Purpose:**
 - To serve as a **tool for balancing** NA by confronting sources at a detailed level
- Advantages:**
 - NA-figures of **higher quality** because errors in sources are more easily detected
 - The balanced SUT is the most **detailed picture** of the economic structure
 - SUT serves a very good **basis for compiling Input-Output tables**
- Background:**
 - Danish SUT's are developed in 1970'es



Introduction - Information flow in NA compilation



Main sources

- Accounts statistics
- Product statistics (Manufacturing, Agriculture)
- Foreign trade- and balance of payment statistics
- Price statistics
- Employment statistics
- Accounts of State, municipalities and other units of General Government.
- Information from supervisory authorities for monetary institutions, insurance etc.

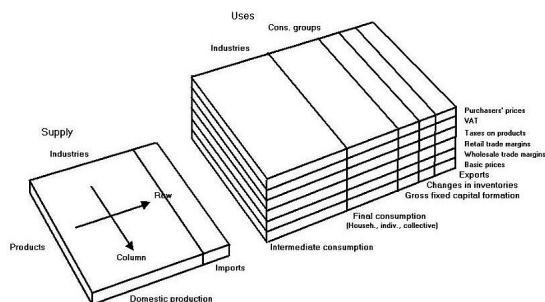


Structure of uses by products:

- Surveys of the use of raw materials and other costs.
- Household budget surveys
- Energy balances
- Financial services and insurance
- Motor vehicle related expenses
- Any other information on the use of specific inputs



>> Supply and Use tables - matrices



>> Setting up a SUT - an overview

- **Basic idea:**
 - Make use of the sources in the best possible way
- **Questions ?**
 - Which cells in the matrix can be filled in every year ?
 - Which cells in the matrix do we not know every year and therefore have to be estimated ?
- **Answers !**
 - Production, imports and exports of detailed products – the **supply in DK** – can be compiled every year.
 - Part of the use matrix - some of the cells on the use side – can be compiled every year
 - The rest of the use matrix have to be estimated

>> Compilation in 5 steps

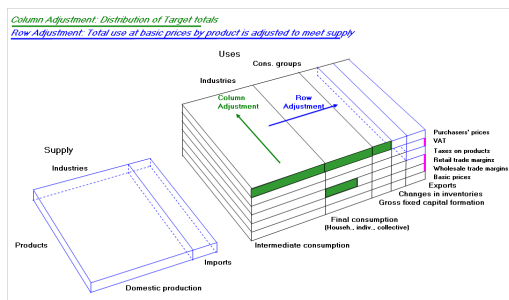
Rows = NAproducts
Columns = combined Transaction - Industry /Consumption group

1. **Classifications** (definitions of row- and column dimension in the matrix) i.e. Which nomenclatures for products, industries, Consumptions groups transaction codes ets.
2. **Target totals** (= sum of rows in the SUT) from Specification from Accounts statistics of total Production or total Intermediate Consumption for every Industry og total Private consumption for every consumption group.
3. **Initializing the SUT** (= Compilation of cells in the SUT)
4. **Balancing the SUT - Manually**(= specification of the rest of the matrix)
5. **Balancing the SUT - Final automatically balancing**

>> Setting up a SUT - Step 1 Classifications

- **Approx. 2.350 products (rows):**
 - 1.950 products based on HS used both in Foreign Trade statistics and in Production statistics
 - 400 services based on CPA (Central Product Classification by Activities)
- **130 Industries (columns)**
 - Based on the european classification NACE Rev. 1.1
- **72 Private Consumption expenditure groups (column)**
 - based on COICOP (Classification of Individual Consumption according to Purpose), which is integrated in SNA and ESA (European system of NA
- **Government consumption expenditure (column)**
 - based on COFOG (Classification of the Functions of Government)

>> Setting up a SUT - Step 2 - 4: Filling in the cells in the SUT



>> Setting up a SUT - Step 5: Manual balancing

- Is conducted by 4 to 6 persons within a month.
- Each person is responsible for
 - a complex of industries and categories of final use with a high degree of interaction
 - the products they have in common on either the uses- or production side.
- All products and categories of use must belong to a complex.

>> Responsibilities of the “balancers”:

- To eliminate still existing differences between supply and use of products at basic prices.
- To check the credibility of the results from the automatic balancing.
- To redistribute products between uses in the complex until the sum of values in each column is within an acceptable distance from its target.
- To evaluate whether the results indicates needs for adjustment of the target column totals.

>> Conclusion:

- The SUT-system in connection with the annual final accounts has been working for more than 30 years. The basic principles of the system are unchanged.
- Building a SUT from scratch – involves an extra amount of resources devoted to create the detailed structural picture of the economy.
- The manual balancing has proved useful as a tool for detection and correction of errors and inconsistencies.
- Automation of the balancing process seems most convincing
 - where detailed data sources are not available
 - when known problems have already been corrected manually

>> Software environment:

A network with special developed software:

- A shared master file on the network contains the most recent version of the SUT.
- The spreadsheet environment is used as interface to the shared master file.

>> ...the spreadsheet environment

- Macros called from toolbars in the spreadsheet environment are used to:
 - select and extract data from master-file to spreadsheet
 - test the results from updating the master file with corrections from the spreadsheet. Corrections are tested for errors before they are accepted
 - update the master-file with corrections
 - access information on the present status of the balancing process

>> ...a new IT SUT program tool

which operates exclusively within EXCEL