# Danish GFS compilation system

by Martin Rasmussen



## **Overview**

#### Structure of entries and sources

- Budgetary sourcesNon-budgetary sources

### **Delimitation**

- General governmentFinancial/non-financial

### The classification process

**Time adjustment** 

Micro-macro link

**Software** 



## **Budgetary units**

Central government accounts

- Municipality and regional accounts
- Accounts for Social security funds
  - Unemployment funds



## Extra budgetary units

- Central government extra budgetary units
  - Universities
  - Secondary schools
- Local government extra budgetary units
  - Tourist information agencies



## The amount of primary entries and level of detail:

Central government transactions:
55.000 entries
Municipalities and counties:
15.000 entries
Social security funds:
150 entries
Extra budgetary central government institutions:
4.000 entries



## **Overview of paragraphs/sections:**

§ 01-45 § 51 § 52-56 § 56-59 § 61 § 62	Central government accounts  Consolidation Various national account calculations and imputations Extra budgetary units State Church calculations State Church Accounts
§ 63	Social security funds
§ 64-69	Various national account calculations and imputations
§ 70	Local government accounts (regions)
§ 71-79	Various national account calculations and imputations
§ 80	Local government accounts (municipalities)
§ 81-89	Various national account calculations and imputations

Central government	RED
Social security	YELLOW
Local government	BLUE



## **Delimitation (sector)**

- Extra budgetary institutions are added to the dataset
- Entries outside the GFS definition of general government in the budgetary information concerning e.g. public quasi corporations are not removed but classified as "sector delimitation corrections"
- The primary data is intact and the working balance can be calculated



## The classification process (75000 entries)

### Overview

#### **Automated process**

- Codes are applied using a matching process:
  - type of transaction
  - COFOG
  - Industry
- Non matched and trivial entries are coded automatically using conversion rules from primary accounts to GFS/national accounts

#### Manual process

- Manual classification is applied on residual entries (around 5000 entries)
- A classification manual is used for the manual classification

#### Validation of data

- Logic tests
- Inspection of time series at micro level



# The coding process

## **Consolidation issues**

- All entries relevant to the consolidation process are classified as consolidation entries
- This makes consolidation easy.

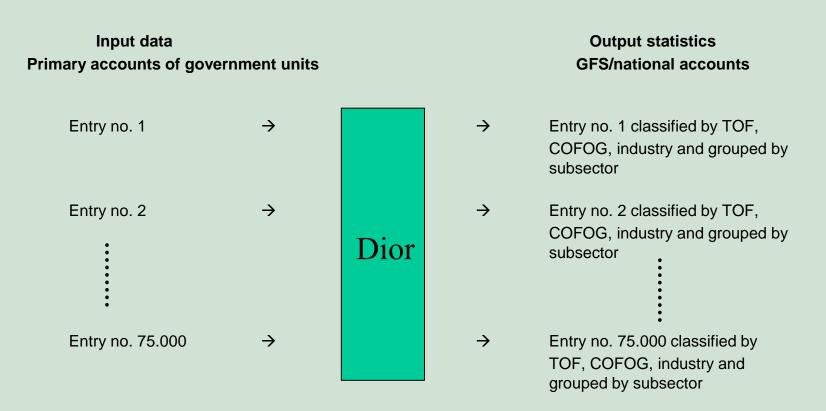


## Time adjustments

- All time adjustments are made as supplementary corrections to the original entries and not by substituting the entries
- This again helps keeping track on the transition from primary data to national accounts variables and aggregate/GFS statistics
- On a quarterly basis more time adjustments needed



## Micro-macro link



**DIOR = Detailed Integrated Government Accounts** 

Categories defined by: Sector, Type of transaction, COFOG, Industry



## Micro-macro link

Two types of questions can be answered:

- 1. How has a given transaction in a certain government institution been classified in GFS/national accounts and with which effect on government consumption, deficit etc.?
- Where does an expenditure/revenue category in GFS have its origin in primary accounts of government units?



## **Output**

- Type of transaction (SNA/ESA) table
  - Revenue, expenses and net lending/borrowing
  - On subsectors
- COFOG table
- Cross compilation table COFOG and type of transaction
- Tax, specification table
- Social benefits, specification table
- Subsidies, specification table
- Interest, specification table



## **Software**

- The GFS compilation system is developed in Oracle
- The system generating tables is programmed using SAS
- The GFS compilation system is basically a database where:
- calculations is manually added to the entries in the system



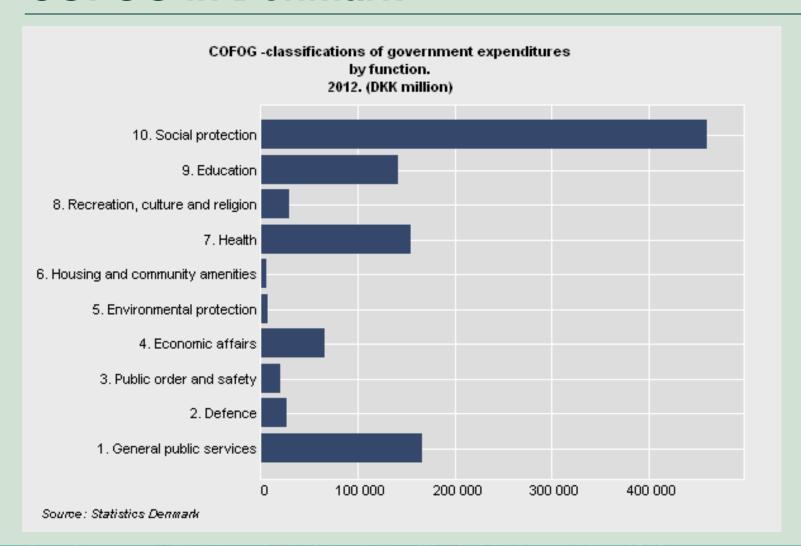
## **Software**

 or where semi manual calculations made in Excel are loaded

 or where fully automatic applications are executed



## **COFOG in Denmark**

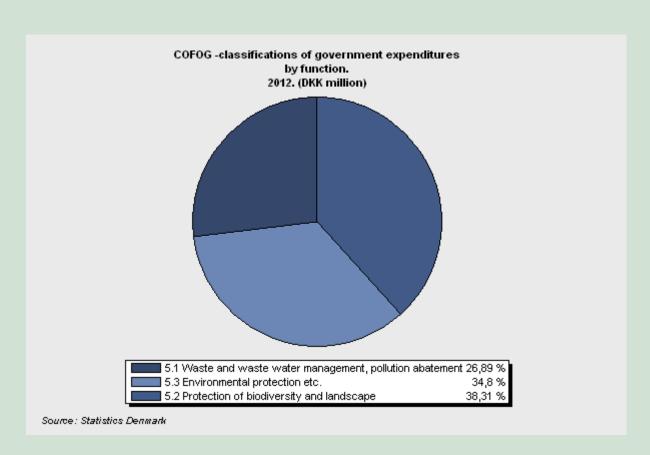




## **COFOG** in Denmark

# 5. Environmental protection

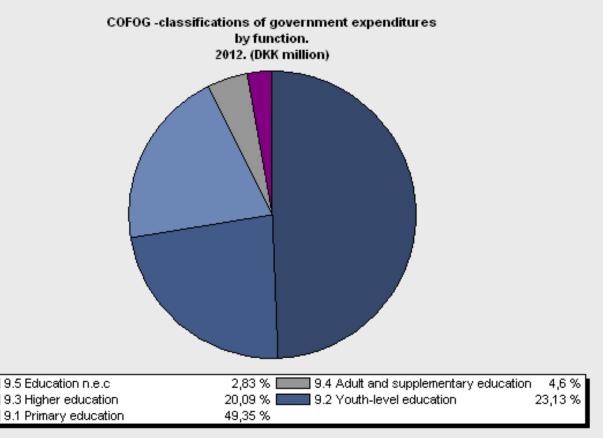
- Based on the CEPA classification
- Will be split into six groups in the future





## **COFOG** in Denmark

9. Education
Strong links to
ISCED
classification



Source: Statistics Denmark



# Coorperation with the Ministry of Finance

- Most important supplier of input data
- Best knowledge of central government accounts
- One of the most important users
- Close cooperation in relation to budget versions of the GFS statistics
- Excessive deficit procedure
  - MoF: Forecast years
  - DST: Historical years



# Coorperation with the Ministry of Finance

How do we ensure a good and consistent relationship to MoF?

- A written agreement memorandum of understanding
- This approach also ensures the independence of the statistical agency

