

# Extracting data from enterprise accounting systems in the SBS in Sweden

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# Outline of presentation

Part 1: The Swedish SBS

Part 2: Project on extracting data from accounting systems

Part 3: Evaluation of the project and future plans





# Part 1 The Swedish SBS



# Swedish Structural Business Statistics (SBS)

- Annual
- Designed according to EU-regulation and National Accounts Needs
- Covers business sector (NACE 01-96 excl. 64-66, 84)
- Population based on Business Register
- Approximately 1 000 000 enterprises



### Swedish SBS

- Based on administrative data (tax register)
- Complete questionnaire to the 600 largest enterprises
- Additional data from 3 separate sample surveys:
- ✓ SpecRR Income and costs (17 000)
- ✓ SpecI Investments (4 000)
- ✓ SpecA Shares (600)





# SpecRR – A specification of the income statement

- Purpose: Obtain detailed information about income and costs
- Data collection: Web-application. Pre-printed totals from the Tax Agency
- The respondents are asked to specify the preprinted values
- The costs are closely linked to the Swedish chart of accounts, BAS



## Variables in SpecRR

#### **Income statement**

#### Net turnover

- + Other operating income
- + Changes in inventory
- + Activated work for own account
- Cost of trade goods and raw materials
- Other external costs
- Personnel costs
- Other operating costs
- Depreciation costs
- = Operating profit / loss

### Breakdown of income and costs

Breakdown of turnover

Breakdown other op. income

Breakdown of other external costs

Breakdown of personnel costs

Breakdown of other op. costs

Breakdown of depreciation

# SCB

# Part 2 Project on extracting data from accounting systems



## Background to the project

- Simplify the data collection process
- Reduce the response burden
- Investigate the possibility to use the standardised Swedish format SIE
- Extend the use of BAS
- Tests have previously yielded positive indicators of increased data quality and reduced non-response.



# Design of the experiment

- The experiment was carried out as a part of the regular SpecRR survey (autumn 2012)
- Limitations with respect to industry (NACE) and size
- NACE codes included: 07-33, 45-47, 69, 71-72, 78, 80-82
- Size 10-249 employees
- 658 enterprises was chosen out of 2 600 enterprises



### Response rates

 Out of the 658 enterprises in the experiment 537 (82%) answered the questionnaire

 134 (25%) out of the 537 enterprises chose to answer through the SIE supported solution





## Preparations to be made

### 1. Mapping of variables

- ✓ Many of the SBS variables can be mapped to the BAS-accounts
- ✓ There are new versions of the BAS-accounting plan every year
- ✓ BAS-accounting plans can vary among different NACE codes



## Mapping of variables

#### **Income statement**

#### Net turnover

- + Other operating income
- + Changes in inventory
- + Activated work for own account
- Cost of trade goods and raw materials
- Other external costs
- Personnel costs
- Other operating costs
- Depreciation costs

### **SIE** solution

Must be manually completed

Almost fully completed

Almost fully completed

Fully completed

Must be manually completed

Almost fully completed

Fully completed

Almost fully completed Fully completed



### Preparations to be made

### 2. Adjustment of the data collection tool:

- A separate entrance to the web questionnaire had to be constructed
- ✓ The respondents uploaded a SIE-file and the questionnaire was filled in where there is a unique link between SIE-BAS-SBS
- Other variables must be filled in manually

# 3. Development of a communication plan with respondents



### Collection of data

- The respondents had two choices in the web questionnaire
- Pre-printed totals from tax data in both questionnaires
- Some edits built into the web-questionnaire (Consistency contols)



### Collection of data

- Checks for a few parameters in the SIE file:
- Organization number
- ✓ Reference year
- ✓ Version of BAS 97 or later
- ✓ Type of SIE file



### Collection of data

- The Business Data Collection unit is responsible for collecting, checking and correcting the data
- New phone number for SIE
- Some persons responsible for micro editing of SIE enterprises
- In a later phase personnel from the unit responsible for SBS was involved in checking the SIE files



# Part 3 Evaluation and future plans



### **Evaluation**

### 1. Quantitative evaluation

Is there systematic differences between those who chose or did not choose the SIE alternative?

### 2. Qualitative evaluation

What types of deviations from pre-printed values did occur?

### 3. The respondent perspective

Interviews with a minor number of enterprises who chose or did not choose the SIE alternative



### 1. Quantitative evaluation

**Question:** Is there systematic differences between those who chose the SIE alternative and other respondents?

### **Answer:** Yes

- ✓ A significantly higher percentage changed the pre-printed values
- ✓ Use of more variables
- ✓ Significantly lower proportion of costs on other expenses



### 2. Qualitative evaluation

A review was made of all enterprises that changed their pre-printed values exceeding 5 percent of the original value

### **Most frequent deviations:**

- ✓ Changes in inventories and work in progress –
  the use of BAS differs from its original thought
- ✓ Allocation of costs between different types of costs
- ✓ Consumable inventories part of several BAS accounts



# 3. The respondent perspective

30 enterprises were interviewed

### The general impresson was:

- ✓ The technical solution worked well
- ✓ The respondents experienced a lower burden
- Respondents would have wanted to get rid of manual completion
- ✓ Respondents would have chosen SIE again
  if they had the opportunity



# 3. The respondent perspective

### **Reasons for not using SIE:**

- ✓ No technical conditions at the enterprise for creating or using SIE
- ✓ BAS-accounting plan was too old
- ✓ Lack of practical experience of SIE



# Conclusions from the project

- Overall positive reactions from respondents and moderate costs for Statistics Sweden
- Technical support for mapping is needed
- The access to detailed information from the accounting systems made us aware of quality aspects in the SBS



### Future plans

- Offer around 4 000 enterprises the opportunity to upload SIE files
- Continue the cooperation with BASstakeholder association
- Offer the technical solution to other surveys



# Thank you for your attention!