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Discussion item

Tests and changes in the domestic trade statistics

Experience in Sweden during the last few years.

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Tests and changes in the domestic trade statistics 1990-1998

- A** Domestic trade statistics in Sweden consists of two surveys, short-term turnover statistics and short-term inventory statistics. The turnover statistics covers the whole service sector excluding transport, financial services, real estates, education and health. The inventory statistics only covers distributive trade.
- B** In the early nineties the domestic trade statistics was criticised because it was insensitive for changes in the economic cycle. 1992 we decided to change method. Until 1991 only the relative changes in turnover value were estimated. The estimates were based only on identical units, which were those enterprises that were in business the two compared periods and supplied data for both periods. An estimate of the turnover value itself was computed by linking a number of estimated changes back to a value decided by some other procedure.
- C** By the new method we primary estimate the turnover level and the changes are calculated by the turnover levels. The level estimator is done by a combined ratio estimator, adjusted for non-response with auxiliary information from the VAT-register. With this method, we were able to decrease our sample size and at the same time increase the quality.
- D** In the short-term inventory statistics we ask about the value of stocks divided into different products. The major problem in this statistics is the possibility for the enterprises to answer the questionnaire. Before 1996 we sent out the same questionnaire to all enterprises and asked them to do the division into products quarterly. The result was a very low response rate. 1995 we started to look over this statistics. We located three different kind of enterprises;
- enterprises that could answer quarterly and break down the stocks by product
 - enterprises that could answer quarterly, but only the total value of stocks
 - enterprises that could not answer quarterly.
- We decided to have different questionnaires for these three groups and by statistical methods and auxiliary information estimate the total value of stocks by products. By using this method we increased the response rate from 60 per cent to nearly 80 per cent.
- E** In purpose to evaluate the estimated value on our short-term turnover statistics we compare it with the value in the structural

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business statistics and VAT-statistics. We do this work in co-operation with the National Accounts when the data from structural business statistics are ready.

F Before 1998 we had not access to VAT information fast enough to use it for short term statistics. From 1998 we have this possibility. Therefore we have started to compare the results from the questionnaire based survey with results from the VAT information. The results from this comparison show large differences in some activities. We have found two major reasons:

- The VAT-unit and the statistical unit is not the same. This is common for big enterprises. For this group the answers from the questionnaires are most reliable.
- Enterprises have misunderstood the questionnaire. The two most common misunderstandings were: a) the answer only covers a part of the enterprise, b) the answer excludes VAT instead of includes VAT.

During the autumn 1998 we are going to do more tests. The method we probably will choose is to use VAT-information for the SME and use questionnaire for the large enterprises.

G 1996 we started to collect data by phone with Touch tone Data entry (TDE) technique in order to decrease our costs for data collection. For every answer that comes through TDE we save about 7 SEK (nearly one dollar or ECU) compared to if the questionnaire was sent back by mail.

H During 1996 we did a look through of the whole process in domestic trade by using TQM-technique (Total Quality Management). Some results of this overview were:

- The processing time was reduced by one week.
- The editing process got more efficient. As an example we started to use graphic editing.
- We could increase the statistical quality by using more efficient samples.
- We got a picture of the user needs, by sending out a questionnaire to users.
- We made a basis for the new PC based data system which we started to use 1998.