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Country Experience on Pilot Survey

Eurostat's Experiences on Pilot Surveys:

I) Preliminary Results for the Business Services Sector

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Summary

This paper presents some preliminary findings based on an analysis of the results so far obtained from some of the participating countries. Other more detailed studies are being undertaken, and the results will be further exploited by both Eurostat and the Member States concerned.

The first comment that should be made is that participating countries represent a very varied groups, some with very well-developed systems for collecting data on business services, other with no prior experience.

Accordingly, very different methodological approaches were used, (although common methodological guidelines were developed).

One important difference between countries was whether to use a single survey questionnaire for each subsector, or different ones tailor-made to each of them.

An important finding made by some countries was the extensiveness to which individual enterprises were active in move than one sub-sector. This aspect reinforces the findings reported by Marco Martini in his "Empirical application of the Client-Function-Mode criteria to the identification and classification of business services". Some countries obtained very detailed data on the distribution of turnover by type of activity. Further study of these detailed data is envisaged.

Finally it was found that even this first round of sample surveys had a universality of application beyond the EC Member States, since two EFTA Member States also participated, without having been intimately involved in the elaboration of the methodology.

Introduction

1. At its 1971 meeting at Helsinki, the Voorburg Group was informed of the current developments of Eurostat's programme for statistics on business services: (c.f. "Development of Methodological Guidelines for conducting Pilot Surveys on the Business Services Sector" of July 1991). The present paper updates the previous one, and gives some preliminary data for selected countries.

Statement of advancement of the pilot surveys

- 2. On the basis of the Methodological Guidelines developed by Eurostat, the twelve EC Member States and two EFTA Member States (Finland and Sweden) agreed to undertake pilot surveys on the eight sub-sectors of business services.
- 3. At this point in time, Eurostat has received results from ten of its twelve Member States as well as from Finland and Sweden. The reports recently provided by Germany, Portugal and Spain are currently being translated. The reports, (and the data contained therein), received from the other nine countries have been scrutinized, and in some cases additional data and/or clarifications have been requested from the countries concerned.
- 4. It is hoped that the two outstanding reports (for Belgium and for Greece) will be received in the very near future.

The representativity of the survey results

5. Although the National Statistical Offices of some EC Member States have relatively well developed systems for the regular collection of data on business services, in others the pilot survey represented a totally new experience,

requiring a considerable effort in developing a sample of relevant enterprises and in sensitizing the enterprises into the potential usefulness of the data that were being requested.

- 6. In the case of Ireland and the United Kingdom, the task of undertaking the survey was entrusted to private agencies, who lacked the legal authority to oblige enterprises to complete and return the survey questionnaires. Consequently, response rates in these two countries were relatively low.
- 7. Countries participating in the pilot surveys were requested to seek to obtain data from a minimum of either 1,500 or 3,000 enterprises (depending on the size of the country). Although it was recognized that these sample sizes would not be sufficient to provide reliable estimates of the total universe, they had been calculated according to the budget funds available for the surveys. Member States were urged to develop systematic samples of enterprises, but this was generally not possible.
- 8. Consequently, the actual data obtained by most countries cannot be considered as representative of their business services sector, but merely as illustrative of the sample enterprises which responded to the questionnaire.
- 9. However, a notable example of the opposite is the case of France. Its pilot survey was piggy-backed onto the regular national comprehensive survey of enterprises, based on a sufficiently large sample that the results (blown up to national level), may be regarded as reasonably representative.

- 10. The Netherlands maintains extensive registers enterprises (including those offering business services). The data generally collected by the C.B.S. cover most of the variables included in the model questionnaire proposed by Eurostat for the pilot survey. For some of the missing variables а sub-sample 1500 of enterprises interviewed, and statistical tables were compiled based on these 1500 enterprises.
 - 11. The predetermined sample size of 1500 was inadequate for ensuring representativity of the total universe. The construction of the sub-sample of 1500 enterprises was (purposely) biassed towards the larger enterprises. In order to illustrate the probable bias attributable to this small sample size, the CBS provided estimates for some variables of their value for the total universe.

Identification of the Principal Sub-sector of Activity

- 12. In the Methodological paper prepared for the Helsinki meeting of the Voorburg Group (c.f. para.1 above), the eight sub-sectors of business service were defined in terms of NACE/Rev.1.
- 13. In the "Guidelines" CPC-COM codes were provided as a guide to how the distribution of turnover might be determined according to these eight categories of services.
- 14. The model questionnaire in the "Guidelines" also included an open-ended question: "Principal sub-sector of business services". However, it was not always easy to translate the replies to this open-ended question into one of the eight categories of business services.

- 15. Even an examination of the distribution of turnover by subsector could sometimes fail to produce a satisfactory classification of particular enterprises. In many cases the turnover was distributed evenly over two or more subsectors, and one of the somewhat unexpected findings of the pilot survey was the large proportion of enterprises active in more than one sub-sector.
- 16. As an example of this high incidence of activity in more that one sub-sector, the following figures for the United Kingdom are instructive:

Number of sub-sectors in which an enterprise is active	No. of enter- prises	% of total enterprises
1	744	57.1
2	344	26.4
3	136	10.4
4	55	4.2
5	15	1.2
6	6	0.5
7	3	0.2
8	0	0
Total	1303	100

17. Although the U.K. sample of 1303 enterprises is not sufficiently large or systematic to be fully reliable, the fact that 43% of these enterprises are active in more than one sub-sector is very surprising, and suggests that the dividing lines between the eight sub-sectors may need a somewhat closer examination.

18. In fact at least three EC Member States obtained even more detailed breakdowns of turnover by activity than by the eight sub-sectors, which may permit them to undertake a more in-depth analysis of these dividing lines.

Some preliminary data for selected countries

- 19. In view of the unrepresentativity of the data provided by many Member States (as explained above), due largely to the pilot nature of the surveys and to the smallness or inherent biasses in the samples surveyed, the results that are presented in the following pages will be limited to ratios expressed in graphic form.
- 20. No comments will be made on the relative proportions shown in these graphs, (the reader may, with utmost caution, draw his own conclusions).
- 21. Due to time constraints in preparing this paper, the graphs are computer-produced and textual explanations are rather cryptic. To overcome these limitations a few explanatory remarks for each figure are presented below:

Fig. 1. The demand for business services (according to the origin of turnover)

This table has two dimensions :

- a) the origin of turnover from national sources and EC sources (the residual being "non-EC sources");
- b) the origin of turnover from other enterprises and from Government (the residual being "households").

Fig. 2. Percentage distribution of enterprises by employee size class

 The figures in brackets are the number of enterprises to which the data in this figure relate.

$\underline{\text{N.B}}$.: for different graphs this number of enterprises may vary for the same country.

- In the case of Italy, the sample of enterprises excluded all those with less than ten employees.
- In the case of Luxembourg, an upper category of 10+ employees is used to maintain data confidentiality.

Fig. 3. Percentage distribution of enterprises by number of local units

 The figures in brackets are the number of enterprises to which the data in this figure relate.

Fig. 4. Percentage distribution of enterprises by legal status

The categories of legal status are:-

SP = Sole proprietorship

Part = Partnership

Co. = Company

NPO = Non-profit organization

Oth = Other

Fig. 5. Turnover per employee (in thousands of ECU) by sub-sector

- The sub-sector categories are :

Tot = Total

Com = Computer and related

Pro = Professional

Mar = Marketing

Tec = Technical

Ren = Renting and Leasing

Per = Recruitment and provision of personnel

Ope = Operational

Oth = Other business services

Fig. 6. Turnover per employee (in thousands of ECU) by age of firm

The data for France show a far greater regularity than the data for other countries: this regularity may possibly be explained by the much larger sample of enterprises used in the French survey.

Fig. 7. Gross Value Added per employee (in thousands of ECU) by sub-sector

 See Fig. 5. (above) for explanation of sub-sector categories.

Fig. 8. Gross Value Added per employee (in thousands of ECU) by age of firm

 The data for Denmark and for France show far more regularity than the data for the other countries.

Conlusions

- 22. Already some preliminary conclusions are emerging from the reports that have been analysed to-date. Firstly, there is a great heterogeneity of statistical experience in this sector between countries. Some already have fairly sophisticated data collection systems, others will need to concentrate their preliminary efforts in order to develop their registers of enterprises before they can master this type of statistical survey.
- 23. Secondly, the unexpected results observed for the United Kingdom (c.f. para.16 above) suggest that the question of the proportion of enterprises active in multiple sub-sectors should be examined in other countries also, with a view to determining a pragmatic typology of business services activities.
- 24. Thirdly, the availability of detailed data on turnover by type of activity for several countries provides a source of information for a more in-depth examination of specific profiles of activities and an eventual re-evaluation of the suitability of the eight sub-sectors retained for business services.
- 25. Eurostat's "Guidelines" propose a standard questionnaire for enterprises in all sub-sectors. However, some countries preferred to use separate types of questionnaires for each sub-sector. This approach might prove difficult to apply for enterprises active in more than one sub-sector.
- 26. An analysis of the data for all participating countries is being prepared by Eurostat, (with all the necessary caution and caveats that the limitations of the data impose).
- 27. Finally, the excellent reports prepared by Finland and Sweden indicate that this type of survey can be undertaken at relatively short notice by non-EC countries even though they may not have been so intimately involved in the elaboration of the methodology.

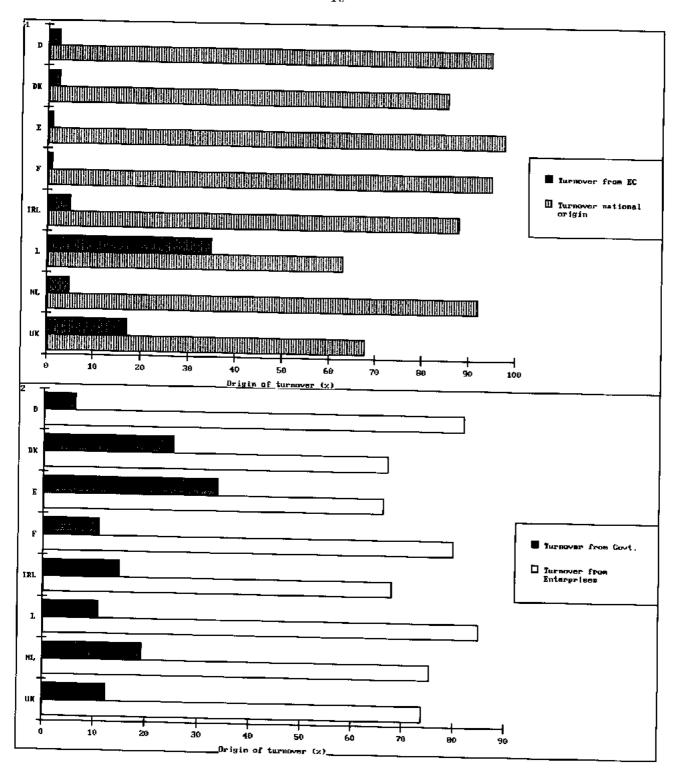


Fig. 1. The demand for business services (according to the origin of turnover)

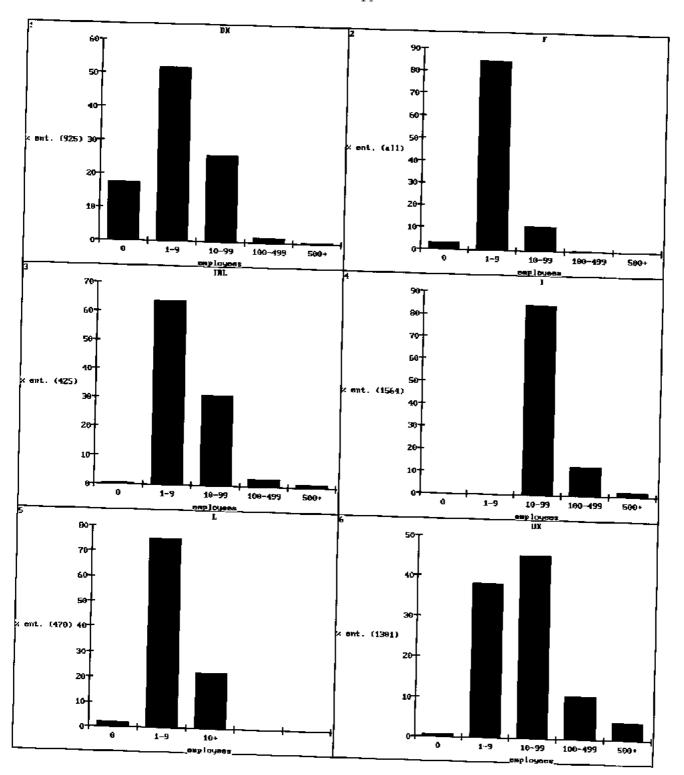


Fig. 2. Percentage distribution of enterprises by employee size class

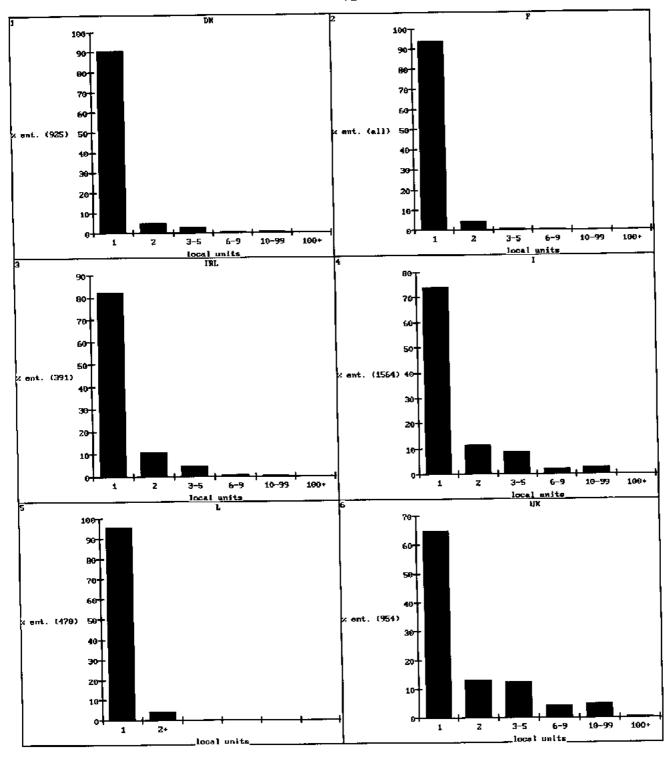
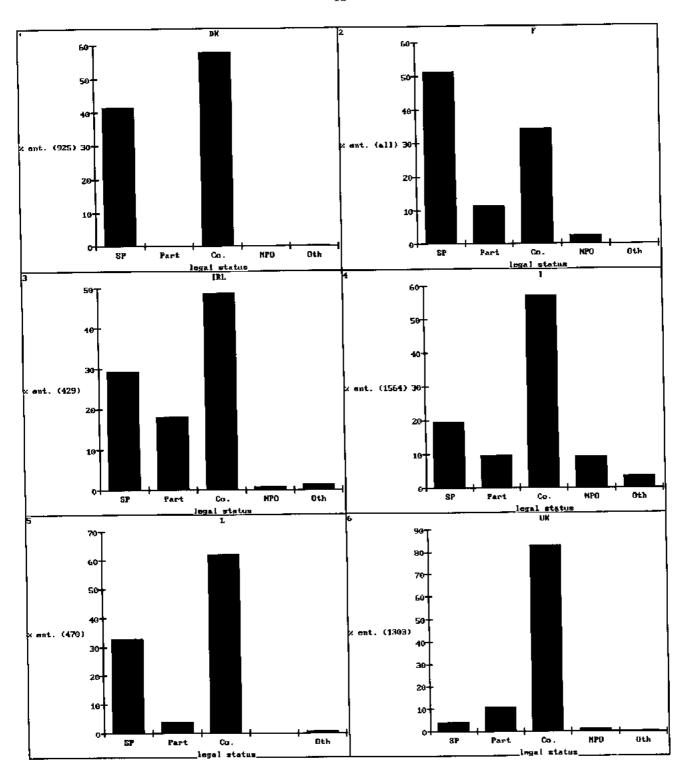


Fig. 3. Percentage distribution of enterprises by number of local units



 $\frac{\texttt{Fig. 4.}}{\texttt{by legal status}} \ \frac{\texttt{Percentage distribution of enterprises}}{\texttt{by legal status}}$

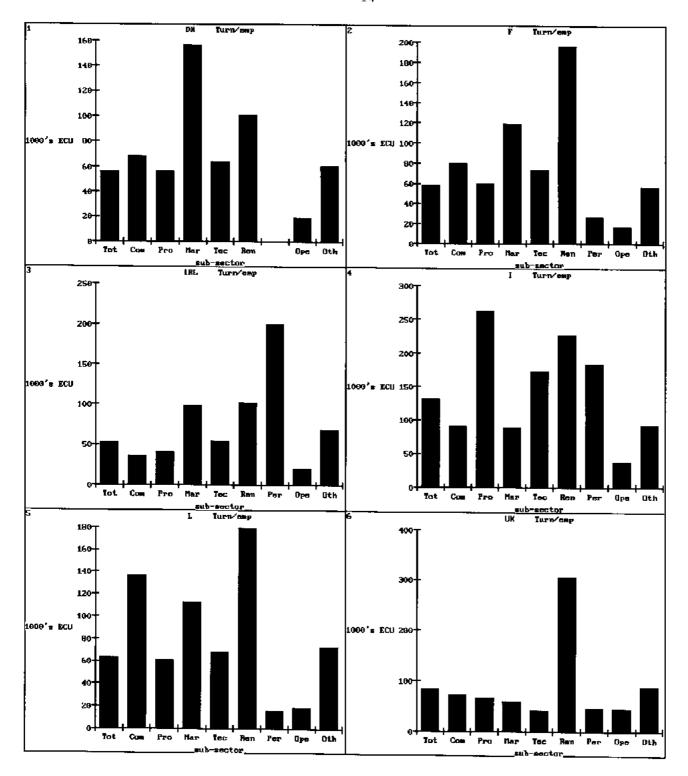


Fig. 5. Turnover per employee (in thousands of ECU) by sub-sector

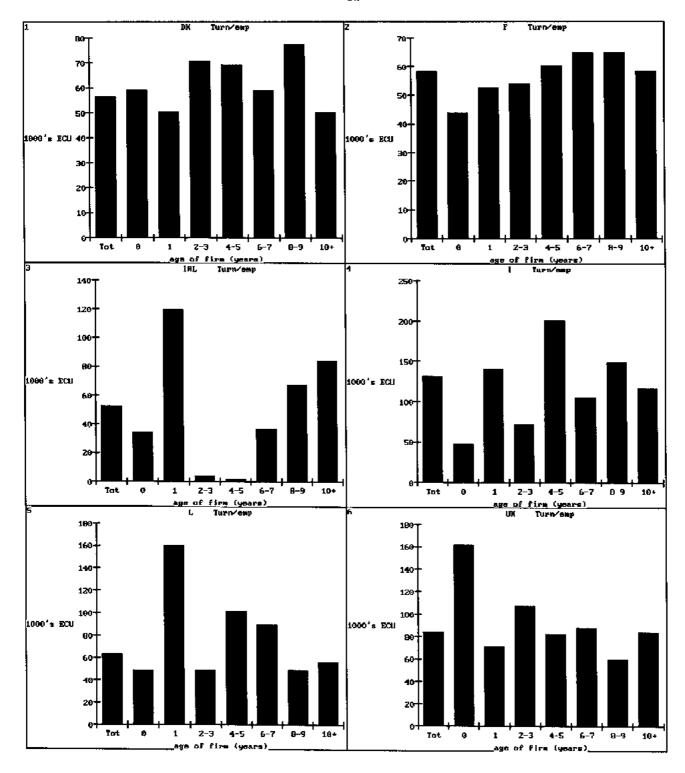


Fig. 6. Turnover per employee (in thousands of ECU) by age of firm

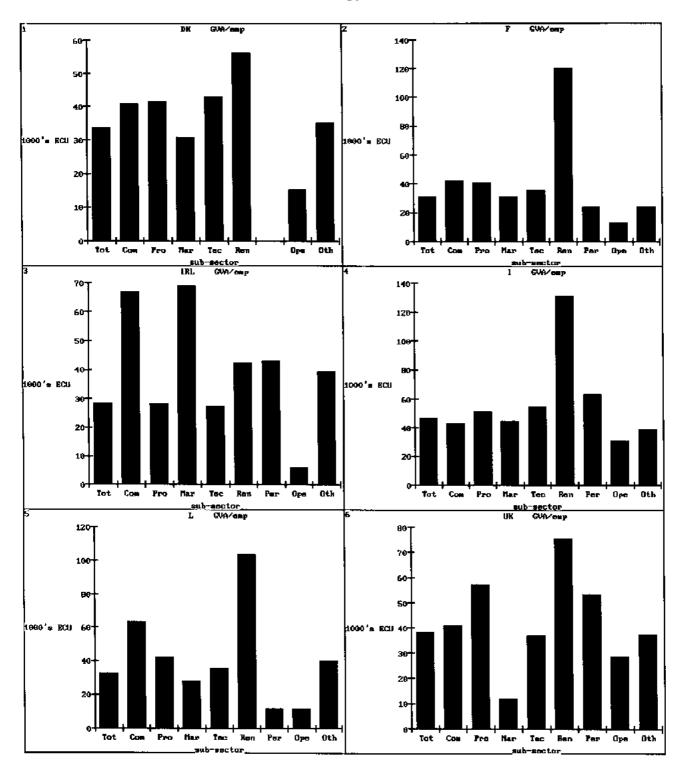


Fig. 7. Gross Value Added per employee
(in thousands of ECU) by sub-sector

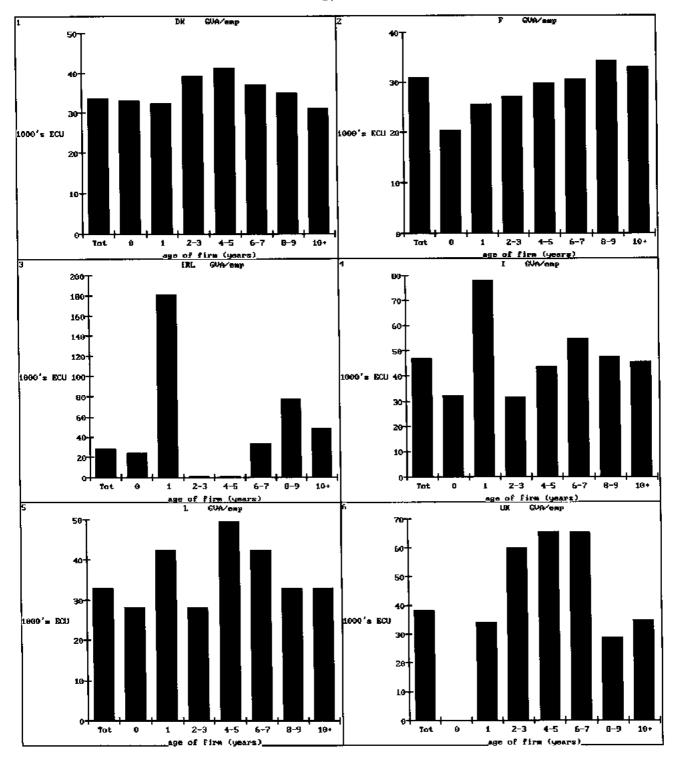


Fig. 8. Gross Value Added per employee (in thousands of ECU) by age of firm