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A statistical review of the analysis of turnover in France

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Session: An analysis of turnover

SUMMARY

This report covers the current method used for the statistical analysis of turnover in France, which is the main focus of the annual survey of firms in the service sector. It then looks at problems reported in recent years. By way of a conclusion, it considers future developments associated with changes to the classification of activities and products.

A. A statistical review of the analysis of turnover

A .1 Essential information

A breakdown of a firm's turnover by activity or by product is essential in structural statistics. First of all, it makes it possible to determine and/or validate the main activities undertaken by the firm, which is crucial when drawing up statistics by operating sector (in France, the main activity code is decided firstly on the basis of the initial business report submitted by the firm and then reviewed and validated every year for all firms covered by a structural survey). It then measures the diversification of firms' activities; this additional information gives statistics for both the sector and the branch, and therefore a sector-branch transfer matrix, widely used for preparing national accounts.

This type of information is of interest only on an aggregated level; for this reason, administrative sources studied for individual analysis purposes do not include these details. It is known that the French statistical system relating to firms is based to a very large extent on the use of administrative sources, mainly of a fiscal nature. Hence the need for a complementary statistical survey. This was the aim of the 1962 survey of manufacturing industries. Difficulties associated with the use of this survey led to the development of a less cumbersome system in the form of the Annual Business Survey [ABS] (Enquête Annuelle d'Entreprise, or EAE).

A breakdown of turnover is one of the essential elements of the ABS, which concentrates on the largest firms, which are in fact the most diversified. As this type of survey must be suited to the specificities of the sector, its contents will therefore vary. In 1971, every industry was covered by an ABS, with trade following in 1972 and then construction and transport. The ABS on trading services was developed gradually between 1982 and 1984, which then provided complete coverage of trading sectors (apart from agriculture and financial services).

Logically, this type of survey relating to structural data corresponds to "model surveys" recommended in their time by international authorities, such as the Voorburg Group, for conducting relevant surveys of trading services firms. In fact, the 1997 European regulations on structural statistics introduces a system on the lines of the ABS with a common trunk for all sectors and more detailed modules for every major sector (industry, construction, commerce, business services, ….). Changes to European regulations have led to the gradual tightening-up of statistical monitoring of services, but has not yet led to a minimum survey classification for an analysis of turnover for the main services provided to firms.

A.2 Annual Survey of Service Firms

Thus, for over twenty years, annual structural surveys conducted in France among firms have systematically included a question relating to a detailed analysis of their turnover. More precisely, in the trading services sector (i.e. property, business services and domestic services, i.e. roughly sections H, K and O of the European NACE classification), each ABS questionnaire suggests a list of specific activities which is more detailed than the 4-level system used in the official French

classification: this list is pre-defined for a given activity sector (resulting in 43 different questionnaires for the service sector), and it is possible for the firm to complete this list to report other activities which are then coded by the survey managers.

The ABS on services is conducted every year among approximately 50 000 firms, which is almost 7% of all trading services firms. As with most ABS's, the sample is exhaustive above a certain size (roughly over 30 employees) and determined by a stratified survey. Since 1997, in order to lighten the burden for small firms, surveys have been conducted in alternate years, with small property firms and domestic services being surveyed in even-numbered years and business services in odd-numbered years. For firms not surveyed, essential accounts information is therefore collated via tax sources.

B. Problems encountered

Twenty years' experience in conducting an ABS of Services has shown that a review of how turnover is broken down sometimes raised led to problems which have gradually been resolved by amending the survey. Firstly, for certain activities, turnover does not accurately describe the firm's activities: a more restrictive basis has to be used (a margin, for example) or else a wider basis (adding production in hand or in stock). Secondly, details of the breakdown cannot be summarised using only the official classification of activities or products, but must also take account of replies that may be given by firms, which has led to a far more detailed classification, which is developing from one year to another.

B.1 Determining the total to be included in the breakdown

For most sectors, production sold as goods and services accurately reflects a firm's activities, and raises the question of whether a more detailed breakdown is necessary.

The purchase and resale of goods or services should be measured only by the commission received by the firm. Sometimes a firm includes the total figure in its turnover including purchases for resale (e.g. the travel agency, which invoices all costs including travel, accommodation and reservations, or the computer services company, which installs equipment), and it is then necessary to estimate the commission actually received. In very general terms, the turnover is then divided by 3 for sales and leasing operations, which amounts to saying that the profit margin is 1/3. As a result, questions generally arise relating to the breakdown of turnover which is then corrected for simple purchase for resale operations.

This may not be enough for describing certain activities. In property, data processing or audiovisual activities, a major part of the production may be in hand and therefore not sold in the year in question. These are sectors with a production cycle lasting more than a year, where annual turnover would not be representative of actual activity. There will then be arguments in favour of a broader notion of production, including not only turnover but also production in hand, and in some cases even financial products (for developers). For example, the development of application, system or utility software may be recorded as fixed Research and Development costs, and this will then be added as a heading in the turnover analysis to determine

the firm's main activity. The production of films or television programmes will be dealt with in the same way for audiovisual firms.

Furthermore, the existence of captive units that work only for the benefit of one other firm or group sometimes causes a problem. The use of production prices in some services has brought this phenomenon to light and raises the problem of the recording of prices which are not actually market prices but are in fact prices for internal transfers within a group. In order to monitor this phenomenon, which has developed over the last few years due to increased power of groups, the ABS of Services now includes a specific question relating to the level of turnover with firms within the same financial group. As a result, for 2003, for a turnover of some 40 billion euros for data processing service firms (NACE division 72), almost 10 billion related to firms belonging to the same financial group, with 5 billion for completely captive units in as much as 100% of their turnover was within firms in their group. This gives rise to the question of how to classify these units in terms of sector. This phenomenon does not affect the sum to be analysed but it does demonstrate the need to give a breakdown of turnover by type of client for a better approach to the market.

B.2 A very detailed survey classification

In the ABS of Services, turnover is analysed using a box detailing the products expected. As these are closely linked to the main activities carried out, 43 different lists have been drawn up for the same number of sectors surveyed. For example, there is a list of 37 products for hotels (NACE 55.10) and another list of 31 products for other types of accommodation (NACE 55.21, 55.22 and 55.23). In this way, each firm included in the survey receives a list relating to its main type of activity together with secondary activities which are frequently associated with it. There is also a heading "other products" which makes it possible to record products not included elsewhere; firms are moreover invited to include text to define any unclassified product or products. In this way, omissions can be detected and the survey lists can be developed each year. Furthermore, regular contact with professional organisations in the sectors covered provides an opportunity to check whether the products and the names used for them have been understood properly by the firms concerned.

This has led to the development of a survey classification that is far more detailed than the official classification for French products, which corresponds exactly to the European Classification, known as the CPA. Thus, in the field of trading services covered by the survey, although 96 classes of activity are listed (4-figure level) according to the French activity classification (slightly more detailed than the European NACE classification) together with 240 positions for the products classification (CPA), the survey classification for products includes over 640 items for service activities alone.

The detailed nature of this classification has moreover led to further refinement which is much appreciated by professional organisations and users: a principal activity can be defined at a far more detailed level than with the official classes in the classification of activities (e.g. hotels can be classified according to the number of

stars, the official indicator of the standard of comfort). Thus a 376 position system is used (as compared to the 96 classes in the official classification for this sector).

In effect, records show quite limited diversification among firms. In practice, each firm responding completes only a few lines. Thus for 2003 (looking only at the 1500 largest firms, which are naturally the most diversified), the maximum number of product lines completed was 25, which applied to only one firm. Thirty-six firms used more than 10 lines, with 217 using 5. It is also recognised that a vast majority (60%) of the 50 000 firms surveyed completed only a single line.

At the same time, it can be seen for 2003 that few service product lines were not used. In 19 of the 43 sectors included, all product lines were used by at least one firm; for 35 of the 43 sectors surveyed, over three quarters of the detailed lines were used.

Thus the current survey classification has proven to be effective since it is used in detail by firms; but an analysis of a number of special cases shows that the quality of replies was variable. For comparable activities, the subsidiaries of one group completed one line in some cases, but five or six in others. In this configuration, product information is only of good quality on a semi-aggregated level. This raises the problem of the optimum level of product classification.

C. The future by way of conclusion

The developmental and highly detailed nature of the survey classification is advantageous in relation to the forthcoming change of classification in 2008. The addition of scores of detailed product codes should be enough to collate information for double coding using both the old and the new classifications.

The detailed nature of the survey classification also represents a management cost for both the firm and the survey itself. Can these costs be reduced? There are two avenues to be explored.

Firstly, the introduction of the new classification should be an opportunity for a further examination of the optimum breakdown according to the aims identified. On one hand, for national accounts only, a less detailed report might suffice. On the other hand, the detailed approach to the markets necessary in order to determine price indices and the demands of professional organisations and firms will lead to more detail. Aiming to describe the markets that members of the profession consider significant, and where monitoring of prices is possible and meaningful, could be a selection criterion.

Secondly, the French practice is a full-scale survey each year, but many countries conduct surveys using cycles of variable length depending on the sector in question. This approach would spread the survey burden better for firms and survey managers and should therefore be used in conjunction with an annual estimate to give a complete sector-branch transfer matrix.

All these points are to be examined in France shortly as part of a major review of the French business structural statistics system.

Type of questionnaire (defined in relation to NACE groups or classes)	Number of CPA codes	Total number of products included in the questionnaire	Average number of products reported	Maximum number of products reported	Number of products used/Total number of questionnaires (%)
55.2	7	31	5.6	19	100.0%
55.4	1	22	0	0	0
55.1	1	37	6.3	13	100.0%
55.3	4	29	2.9	15	100.0%
55.5	4	14	1.9	6	100.0%
63.30	4	12	3.5	8	100.0%
64.12	2	8	1.5	5	75.0%
64.20	12	35	4.3	13	100.0%
67.20	2	21	3.8	16	81.0%
70.2 + 70.3	10	51	4.0	12	100.0%
70.1	6	44	3.0	25	100.0%
71.3	5	36	2.2	8	63.9%
71.4	6	27	2.2	5	63.0%
71.1+71.2	8	22	2.4	5	100.0%
72.1+72.2	8	46	3.3	11	82.6%
72.3+72.4+72.5	12	43	2.7	12	88.4%
p74.20	4	26	2.5	6	69.2%
74.30	6	14	2.1	7	100.0%
p74.85	6	19	1.8	5	100.0%
p74.87	1	23	2.5	8	87.0%
74.13+74.14	11	28	1.8	8	92.9%
74.15	1	29	2.6	16	75.9%
p74.20	16	29	1.9	6	89.7%
74.11+74.12	13	28	3.2	11	100.0%
74.81	13	15	2.2	5	100.0%
p74.50	7	11	1.5	3	81.8%
74.70	6	25	4.4	12	96.0%
74.40	4	33	2.2	10	100.0%
74.82+p74.85	2	21	1.8	6	100.0%
74.60	6	17	2.6	8	100.0%
p74.50	5	12	1.2	3	41.7%
p74.87	6	15	1.1	2	40.0%
90.0	11	28	3.9	17	100.0%
92.40	1	13	2.1	8	76.9%
p92.11	1	35	3.1	7	62.9%
p92.11+p92.20	8	61	4.7	11	100.0%
p92.20	2	13	3.5	11	92.3%
p92.20	3	23	3.7	7	100.0%
p92.12	1	30	3.2	9	46.7%
93.01	6	22	3.1	8	95.5%
93.02+93.04	5	21	2.7	6	85.7%
93.03	2	11	4.6	9	81.8%
93.05	2	18	2.0	5	27.8%
OVERALL	241	Not applicable	3.0	25	Not applicable

Scope: 1500 largest firms in the ABS of Services, representing 39% of total turnover.