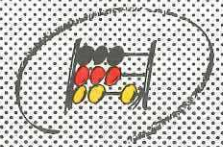
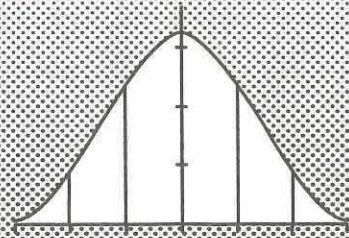


263,26

Approaches



Federal Statistical Office



Methods

Developments

Information of the German Federal Statistical Office

Number 2/99

Contents

	Page
The catchword	
The marketing concept of the Federal Statistical Office	3
Methods of federal statistics – Further development	
New concept for surveys of production in manufacturing from 1999	4
Evaluation of the 1995 structure of earnings survey by means of regression analysis	6
Revision of consumer price statistics	6

Published by:

Federal Statistical Office, Wiesbaden

Information:

Statistisches Bundesamt
General Information Service
D-65180 Wiesbaden

- Phone: + 49 - 611 / 75 24 05
- Fax: + 49 - 611 / 75 33 30
- E-Mail: info@statistik-bund.de
- Internet: <http://www.statistik-bund.de>

Further information on this publication may be obtained from:
Division I B

Phone: + 49 - 611 / 75 20 77

Published in November 1999

© Copyright: Statistisches Bundesamt, Wiesbaden 1999

Reproduction and distribution are permitted provided that the source is mentioned.

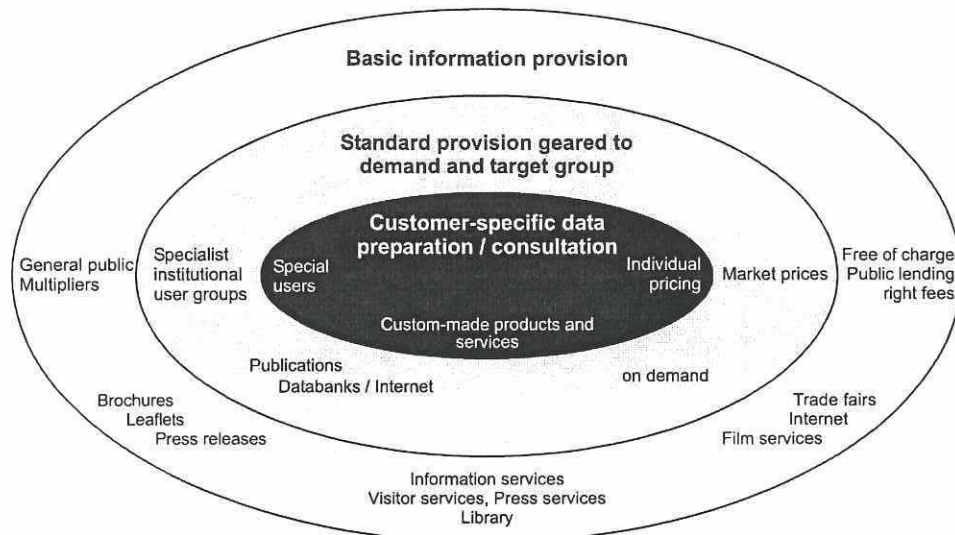
Printed on 100 % recycled paper.

The catchword

The marketing concept of the Federal Statistical Office

For a couple of years now, the market for statistical products and services has experienced new and very dynamic developments. While, on the one hand, the demand for statistical products, information services and consulting has largely grown and is today expressed by many different groups of users, the range of products offered, on the other hand, has become much more comprehensive, sophisticated and modern compared with previous years, owing to the increased demands made upon it. On the information market, there is a demand for both relevant information and competent consulting. The Federal Statistical Office has set itself the goal to serve the public as a competent and reliable information provider and consultant whose work is customised to meet the users' requirements.

The new marketing concept of the Federal Statistical Office is aimed at both fulfilling the Office's legal obligation to publish statistical data, and satisfying the data requirements exceeding this "basic supply". The basis for this work is a marketing model which encompasses the following three areas: "basic information provision", "standard provision geared to demand and target group", and "customer-specific data preparation/consultation".



The basic information provision (outer band) is designed to meet the basic information requirement of the general public and offers citizens, politicians and also those residents of other countries who are interested the right and the opportunity to obtain neutral and objective information. The basic information provision includes press releases, leaflets, brochures, replies to minor inquiries addressed to our general information services, statistical publications offered in libraries, the participation in trade fairs and exhibitions, contributions to events, and the dissemination of general information and key data via Internet.

Products and services beyond the basic supply which are tailored to special information requirements of specific target groups (e.g. multinational companies, associations, banks, universities, libraries, etc.) and may be offered in the form of standardised products prepared in advance (printed publications, CD-ROMs, disks, online-services) are market products that compete with products of other data providers on the information market and can hence be sold at market prices. Those products have to meet certain criteria of competitiveness (relevance, rapid availability, price and supply transparency, supply continuity, efficient and exhaustive distribution, user-friendliness). Licences can also be issued and discounts granted on all products belonging to this category. Cooperation in preparing and distributing such products is sought wherever it is possible and expedient.

Custom-made solutions (middle band), which require specialised and often detailed compilations of data on an individual client basis (e.g. complex enquiries addressed to our statistical information services, specialised analyses of statistical material, or expert opinions), occupy a special position. Such services cause costs which are calculated and invoiced to the customers. In this respect, the statistical offices act as service contractors who carry out orders from customers. What is crucial here is customer-orientation, high-quality solutions, and deadlines must be met.

As a result of all this, a coherent pricing system has been developed founded on the three bands of the marketing model. According to that system, products and services belonging to the segment "basic information provision" (outer band) are offered free of charge. Products and services classified with the segment "standard provision geared to demand and target group" (middle band) are sold at market prices, and products and services grouped with "customer-specific offer" (core area) are priced individually.

Only the standard products (middle band) can be subject to price differentials. There are also exchange subscribers (e.g. other statistical institutes), and a range of free subscribers (parliaments, government departments, the media and international organisations). Free subscription, however, should be restricted and monitored very precisely. Certain user groups, such as universities, may be allowed discounts that should apply to all standardised products.

According to the marketing model, information is free of charge only if it is part of the basic provision and belongs to the outer band. This type of information consists of telephone enquiries, requests for leaflets, publications catalogues or small-scale photocopies to be sent by post. More substantial information, which is labour and/or cost-intensive, must be individually costed. For information which is standard and on demand (and therefore in the middle band), there are price lists applicable for standard enquiries. However, all custom-made information must be individually costed to cover the additional costs and efforts involved.

The copyright of the Federal Statistical Office includes, depending on the three segments of the marketing model, three different degrees of freedom. Products belonging to the basic information provision (outer band) may be reprinted and disseminated provided that the source is acknowledged. As far as standardised products are concerned, that rule applies only to reprinting and dissemination for non-commercial purposes, while dissemination via electronic systems is always subject to prior authorisation. Custom-made products (core area) are subject to restrictions that may, however, be relaxed by negotiation.

The marketing model of the Federal Statistical Office demonstrates the chance of marketing statistical information which is public property and the extent to which it can and should be sold commercially. The transparent and well-structured model approach answers the frequently-asked question concerning the legitimacy of marketing that information (Why do we have to pay for statistics when they are already paid for out of taxes?): In a democratic state, all citizens must have the right to access basic statistical information. However, it is legitimate to market additional services. Such marketing relieves pressure on the budget, improves resource control and avoids the general public subsidising certain users or user groups.

The marketing model has proved to be a useful tool and has increasingly been used in other European countries as well as a basis for considerations on how to disseminate statistical information.

Silvia Deckl, tel. + 49 – 611 / 75 - 26 24

Methods of federal statistics – Further development

New concept for surveys of production in manufacturing from 1999

Production statistics serve to measure the goods output of the national economy with a breakdown as detailed as possible. Due to that high degree of detail, the figures are also suitable for monitoring the product markets relevant to individual lines of business. Additionally, the system of production statistics has to provide a data basis which is as current as possible for calculating monthly production indices used to judge the development of business activity.

In the past, production statistics were collected by means of two surveys, namely the *monthly production rapid report* and the *quarterly survey of production*. Basically, the two surveys covered the same group of respondents. Some 28,000 local units were surveyed twice.

At intervals of three months, the quarterly survey of production covered all local units of enterprises with generally 20 employees and over whose principal activity was in the field of manufacturing, and all local units of manufacturing with 20 employees and over belonging to enterprises whose principal activity was outside manufacturing. The characteristics surveyed were the value and the volume of the production intended for sale, the volume of the production for processing, and industrial services such as installation work, assembly work, and the treatment of products. The degree of detail was determined by the Product Classification for Production Statistics, 1995 edition (GP 95). For the entire range of respondents, the production of the German economy could thus be presented with a breakdown by some 6,400 types of products.

That complete quarterly picture of the structure was supplemented by a monthly production rapid report for about 1,000 selected types of products (generally headings of the GP 95, or aggregations thereof), used to update the monthly index of production.

In accordance with the underlying theoretical concept, the above 1,000 types of products were selected so as to represent the overall development of the value-added of an economic branch (four-digit item of the Industrial Classification of Economic Activities, 1993 edition - WZ 93) as precisely as possible. They were compiled and defined in the "product list" for the production rapid report, a nomenclature derived from the GP 95. However, at the time of the changeover to the new GP 95 when production statistics were harmonised at the European level, there was no data basis suitable for selecting representative series for the purpose of monthly updating during the transitional phase. Therefore, the product list for the production rapid report, 1995 edition, was regarded and introduced as a merely temporary solution. Originally, the 1,000 types of products to which the list is limited by law were to be selected again in 1998, that new selection taking effect in 1999. When the new concept of production statistics was introduced, that approach was abandoned.

Until then, all local units which were also covered by the quarterly survey of production and whose production program included at least one of the products of the above-mentioned representative selection of 1,000 types of products had been under an obligation to provide information monthly. Those local units had to report both monthly on the basis of the product list for the production rapid report (1995 edition) and quarterly with a breakdown by the GP 95, irrespective of their size and market share.

The aim of the new survey concept in the field of production is to avoid surveying local units twice, where possible, and to reduce statistics work for small and medium-sized local units considerably without jeopardising the index quality. Reporting twice as described above is not necessary where monthly and quarterly data provided are broken down by the same classification. In these cases, the statistical offices can calculate quarterly figures by aggregating the figures of the three monthly reports. As a consequence, the group of respondents providing information for the production surveys is split up into those supplying quarterly data and those providing monthly data. Both groups report their data with a breakdown by the nine-digit headings of the GP 95. There is no special product list for the production rapid report anymore. The selection of representative products is replaced by a representative selection of local units reporting at monthly intervals. Those local units are selected according to the representation requirements of index calculation.

For calculating production indices by branches of economic activity, the output of a branch (four-digit headings of the WZ 93) only needs to be represented to a sufficient degree. Experience has shown that a representation by about 75 % per branch of economic activity is enough to obtain reliable figures indicating the short-term development of the branch. To ensure that production indices of a comparable quality can be computed at the level of the Länder, representation is fixed at 75 % for the Land level.

This means that with the new concept, only so many local units have to report monthly production data that 75 % of the output of an economic branch is recorded in each Land. Therefore, only the largest units of the respective branches are surveyed at monthly intervals. The units having to provide monthly production data do not have to submit quarterly reports (anymore). The statistical offices compute the output of the quarter using the three deliveries of monthly data available. Units which have not been selected for monthly reporting merely have to provide data for the quarterly survey of production.

The units to report monthly production data are selected once a year on the basis of their annual output. For each economic branch, the local units of the reporting group are listed in an order of magnitude beginning with the largest output in that branch. Starting with the largest local units, units are included into the selection of monthly respondents until a minimum of 75 % of the branch's output has been reached. This procedure excludes primarily the smaller local units of an economic branch from the obligation to provide monthly data.

In figures, the effects can be expressed as follows: only some 28,000 local units have to submit quarterly reports (before: about 45,000). At monthly intervals, only some 17,000 local units have to be surveyed (before: about 28,000). The selection procedure ensures that the burden of having to report monthly is taken off 11,000 primarily small local units.

All these changes scarcely affect the users of production data: as before, production data are available with the most detailed breakdown of the GP 95 for the entire range of respondents at quarterly intervals. Production indices continue to be published monthly for all economic branches of manufacturing. Furthermore, an index of production is calculated quarterly drawing upon the complete data basis. This index can be used to check the quality of the monthly index. For methodological reasons, the representation of the individual economic branches at federal level increases markedly to over 80 %. As the problem of having to update the selection of representative products at regular intervals no longer has to be dealt with, the quality of production indices improves especially at the four-digit level.

After a transitional phase, production indices computed with the new data basis have been available for the months of January and February 1999 around mid-April. A quality check was first possible around mid-July 1999 when a quarterly index could be computed on the basis of the complete data material and compared with the monthly indices.

However, one sacrifice has to be made for the new survey concept: a welcome by-product of the former survey concept were the absolute values and quantities which could be published also monthly for the 1,000 types of products selected (since all producers of these representative types of products were surveyed). What can be provided now will at most be estimates of such figures due to the varying representation at product level. Presently, the Federal Statistical Office is considering the question of whether stable estimates can be calculated at all and how this can be done.

Joachim Weisbrod, tel. + 49 – 611 / 75 - 22 34

Evaluation of the 1995 structure of earnings survey by means of regression analysis

As part of Franco-German cooperation in the field of wage statistics, a joint comparative evaluation of the 1995 European structure of earnings survey was carried out. Local units with 10 employees and over operating in production industries, the distributive trade, credit and insurance sectors were surveyed; to have a comparable level of earnings, only the former territory of the Federal Republic was covered in Germany. The study centred on the analysis of wage differentials between groups of employees in the two countries.

A wage function was used to explain the wage differentials. The function was estimated on the basis of a multiple linear regression, with the gross hourly earnings of employees as dependent variable and important socio-economic factors as explanatory variables. Both metric variables (age, square of the age, length of service in the enterprise, square of the latter) and categorical variables (gender, occupational group, employment status (full-time/part-time), type of employment contract (fixed-term/open-end), branch of economic activity, region in which the local unit is located, size of the enterprise) were included into the model calculation. A semilogarithmic model was chosen for the estimation, this means the values of the dependent variable were transformed logarithmically. Dummy coding was used for the categorical regressors.

The wage differential between two groups of employees (e.g. German and French employees, men and women) was analysed by means of the "Oaxaca-Blinder decomposition". That procedure provides a decomposition of the differential between the logarithms of earnings into a term reflecting structural differences explained by the variables (differences in productivity, equipment component) and another term which cannot be explained by differences between variables and may be interpreted as discrimination.

Oaxaca first used this decomposition procedure in 1973 to analyse the gender-related wage differential. Other examples have been given by Lorenz/Wright, Groshen and Stephan (Lorenz, W./Wright, R.: Die Messung geschlechtsspezifischer Einkommensdiskriminierung, in: Wirtschaftswissenschaftliches Studium, No. 11, November 1990; Groshen, E.L.: The Structure of the Female/Male Wage Differential, in: The Journal of Human Resources 26, 1991, p. 455 - 472; Stephan, G.: Eine empirische Analyse der Lohnunterschiede zwischen Frauen und Männern, in: Statistische Monatshefte Niedersachsen 1/97, p. 5 ff.).

The detailed results have been laid down by Rouault/Kaukewitsch/Söll (Rouault, D./Kaukewitsch, P./Söll, H.: Verdienststruktur in Frankreich und Deutschland 1995 im Vergleich. Eine statistische Analyse der statistischen Zentralämter zur Gehalts- und Lohnstrukturerhebung 1995, in: Wirtschaft und Statistik 11/1998, p. 867 ff.). Here are some of the analysis results:

1. The average gross wage difference between the two countries is due only to the higher German level of earnings and not to differences in the employee or business structures.
2. The differences in earnings between occupations is greater in France than in the former territory of the Federal Republic.
3. French workers belong to the group of employees which would receive the highest wage increase of all if they took on comparable work in Germany.
4. There is a marked difference between regions and age groups in the French wage structure, and between size classes of enterprises and economic branches in the German wage structure.
5. The gender-specific wage difference amounting to some 24 % in both countries is partly due to differences in the "equipment": 7 percentage points in France and 9 percentage points in Germany.

Presently, the Federal Statistical Office is considering in what form the microdata material of the structure of earnings survey used for this analysis can be made available to a larger group of users for other scientific studies. It goes without saying that the conditions imposed by law to ensure the anonymity of microdata have to be observed.

Horst Söll, tel. + 49 - 611 / 75 - 27 15

Revision of consumer price statistics

From reference month January 1999, the Federal Statistical Office has used the new 1995 weighting base for computing its consumer price indices, i.e. the cost-of-living indices, the harmonised consumer price index for Germany, and the index of retail prices. As usual, the results on the new base are recalculated backwards to the beginning of the price base year (January 1995). There are other changes in addition to the recalculation of weights, the major ones being described briefly in the following.

Most obvious is the introduction of a new classification for breaking down the cost-of living index. The Classification of Receipts and Expenditure of Households (Systematik der Einnahmen und Ausgaben privater Haushalte - SEA, 1983 edition) has been replaced by the internationally common Classification of Individual Consumption by Purpose, which was modified slightly for purposes of consumer price statistics ("COICOP-VPI").

The presentation of results now centres on figures for the entire territory of the Federal Republic of Germany, while data for the former territory of the Federal Republic and the new Länder incl. Berlin-East will continue to be available for some time, too.

1995 is the last base year for which consumer price indices of special household types can be calculated. Those household types are not representative anymore, so the restriction to three specific and clearly defined types of households will be given up in the new concept of family budget surveys. However, the statistics of continuous family budget surveys is the only source from which the respective expenditure weights can be derived. This means that it will not be possible to calculate price indices for specific household types based on the consumption expenditure of the year 2000.

The presentation of rents in the cost-of-living index has been improved. Before, gross rents could not be broken down further since the legal basis did not provide for the collection of data on net rents. Now this is possible on the basis of European legislation. Consequently, net rents and important incidental rental expenses, e.g. for water consumption, waste water disposal, the collection of household refuse, street cleaning, etc. are shown separately.

The inclusion of health care commodities and services into the consumer price indices has also been improved methodologically on the occasion of the changeover to the new weighting base. The coverage of co-payments made by patients has been extended, while the effects of changes in the exemption regulations are also shown in the consumer price index.

The method used to calculate the new weighting patterns has been described in detail in an article published in the February issue of the monthly periodical "Wirtschaft und Statistik". The March issue contains a detailed description of the methodological changes and analyses the impact of these changes on the figures calculated. For current results please refer to the January issue of Fachserie 17, Reihe 7 "Preisindizes für die Lebenshaltung". The quickest way to obtain the recalculated figures (not broken down by expenditure categories) is the faxback service of the Federal Statistical Office (+ 49 - 611 / 75 - 38 88). Additionally, figures of the month can be obtained via telephone answering machine (tel.: + 49 - 611 / 75 - 28 88). Our contact persons for consumer price statistics (service number: + 49 - 611 / 75 - 26 21) may be called Monday through Thursday from 8 a.m. to 5 p.m. and Friday from 8 a.m. to 3 p.m.

Günther Elbel, tel. + 49 - 611 / 75 - 26 27

