

## MARKETING OFFICIAL STATISTICS WITHOUT SELLING ITS SOUL

Lars Thygesen  
Danmarks Statistik  
Sejrøgade 11  
DK-2100 Copenhagen Ø.  
Denmark

### *0. Introduction*

In the good old days official statistics was regarded as a public good. It was given to the users for nothing or next to nothing. Consequently its production was financed by Government funding. The rationale was that official statistics was to be a common information basis for public and political debate. Equal access to information is regarded as a fundamental cornerstone of democracy. As the statistics was produced for Government funds and was produced once and for all, it should be used as much as possible in the best interest of society.

In recent years we have seen in many developed countries a trend towards selling an ever increasing proportion of the official statistics in the marketplace, rather than treating it as a public good. This would seem to be sub-optimal because it leads to less than full use of a public investment. And payment for statistical services cannot even be excused in the same way as payment for some other public investments like roads and bridges that are worn because of use. Statistics can be used again and again without being worn!

Why, then, should statistics be marketed? As I shall explain in the following paragraphs, there may be good reasons for this in certain circumstances. I am also going to discuss problems of and limits to marketing of official statistics. The background of the discussion will primarily be experience of the Danish Central Statistical Office.

### *1. Why sell statistics?*

There is no doubt that the primary reason for most CSOs to start selling their statistics has been budget problems. Since the beginning of the 1970s, many governments have tried to make public services more efficient. One way of doing this has been to reduce grants for, among other services, statistics. The CSOs have responded by trying to raise productivity in order to keep up an adequate coverage of official statistics. And the exercise has been successful in many countries: It has indeed been possible to raise efficiency considerably. By and by, the most obvious opportunities for savings have been exhausted, so if government continues to cut budgets it becomes more and more difficult to fulfil reasonable demands for statistics.

Trying to cope with the budget trap, some CSOs have turned to the solution of selling part of the production. However, this solution is only feasible if government agencies are allowed to use the money they earn in their own budget. In many countries this is not the case, meaning that revenues from sales have to go back in the State treasury. This does certainly not encourage marketing of products that are interesting to the customers (or the users). The more you sell, the worse the deficit will be.

Some countries - and among them the Nordic countries (Skak-Nielsen 1987) - allow the sales revenues to be reused for the production of new statistics. This has made it interesting to develop products that the market wants and to try to boost sales.

It may be argued that this is contrary to the idea of Official Statistics as the common base of knowledge that every citizen can rely upon. We shall return to this very important argument later. On the other hand, marketing certainly helps us in the process of setting priorities: Which statistics should be produced, and which should not. I believe that many official statisticians have had their secret fears concerning the usefulness of their products, because the real interest of the users is impossible to assess as long as services are free or very cheap. Even if the CSO can get rid of their books, it does not mean that anybody really uses them. If users have to pay a market price equal to or close to the full production price, they want value for money and they will consider their needs carefully.

I can confidently say that marketing has helped us in Denmark to adapt more quickly to new demands for statistics. It has made us more sensitive to the voice of the user. And this in my opinion is the most important reason why official statistics should be marketed.

## 2. Which products should be sold?

It would not be in line with the notion of Official Statistics to convert completely to commercial production of statistics. Some kinds of statistics should certainly be financed by Government funds. This is what I would call *basic statistics*, i.e. statistics of a general nature that enables the public, Parliament, business, and local governments to get a good picture of society. *Basic statistics* is not to be understood as something narrow, just covering a few pages in a Statistical Yearbook. It should cover broad subject areas, giving a description of all the important aspects of society: Population, social and living conditions, incomes, production, environment, etc. Basic statistics should have a number of important quality dimensions: It should be relevant, reliable, timely, and reasonably detailed. It should be collected for Government funds and the users should not be charged for its production (but will normally be charged for delivering costs only).

What then is left for marketing? Quite a lot! And especially as computer technology has advanced during the past twenty years, more and more. Because when the CSO has collected the data that are necessary for the production of basic statistics, it possesses a huge data base that is capable of supporting almost infinite amounts of other statistics and analyses. Most often the data are collected in a very detailed form, e.g. individual data on persons, business units, land plots, etc. With the present processing power it would be possible to use a lot of these opportunities. This raises the impossible question: Which of these opportunities should be used. It is completely impossible to publish everything. And for society at large it would be a great loss of possibilities if we were to restrict ourselves to what could be delivered free of charge. So we need the price mechanism to regulate the process.

This means that users will have to pay if they want something special, e.g. very detailed statistics or new combinations of data, or if they want the CSO to perform some resource-demanding analysis. They may also have to pay if they want extremely quick and easy access to statistics. They will certainly have to pay if they demand some statistics on subjects that are not at

all covered, or only partly covered, by official statistics, because in this case new data will have to be collected.

Some typical examples of services offered as payable are:

- Detailed small area statistics
- Creation of special data bases for longitudinal studies
- Additional break-down of National Accounts
- Access to large on-line data bases
- Asking of additional questions in surveys

It should be noted that no opportunities are really taken away from the customers by demanding money for these services: They would not be available if the CSO was not market driven.

### 3. How should statistics be marketed?

There has been and is still much discussion in international statistical circles about how specialised statistical services should be produced and marketed.

One idea with widespread support is that the marketing and part of the production should be carried out by intermediaries or *brokers*. Private companies who are experts in data analysis and dissemination, who know the customers' needs and who have the resources to meet them. There may be good reasons for using brokers, e.g. if the CSO does not have the possibility to reuse sales revenues. It may also be argued that the CSO, being a Government agency and thus being restricted as regards resources and salesmanship, is not in a position to compete with private companies. But I believe this is a dangerous course to choose for a CSO, and consequently also to the users. If the distance between the statisticians and the real users becomes too big, the statisticians will know less and less about what statistics are used for. This in turn will make it difficult for the statisticians to develop the basic statistics as new demands turn up. The statisticians may end living in isolation in their ivory tower. Eventually the brokers may find that the statistical basis is not so interesting to build upon.

On the other hand, contacts with users who really demand statistics can be extremely stimulating and statisticians cannot help learning a lot from that. In Denmark there are several examples that new demands from one group of users who are willing to pay have given rise to subsequent developments in the regular basic statistics.

But of course the official statistician will have problems when entering the unfamiliar role of a salesman. There is no marketing culture in most CSOs. The education of the staff will often have very little to do with marketing. So there is a lot to learn.

Experience shows that there is no need to despair. Results can be attained by moving step-wise forward and making use of the enthusiasm of talented amateurs. At some point in time, it will become necessary to professionalise the efforts, drawing upon marketing expertise from outside and organising marketing in ways similar to that of many commercial companies.

In addition to 'laissez-faire' marketing, some methods that may be used are:

## IN17.1

- Sales meetings for groups of to-be customers
- Direct mail using campaign brochures
- Advertising in newspapers and professional papers
- Participation in exhibitions and fairs
- Marketing research surveys

I shall return to some practical experience in chapter 6.

### 4. *Selling our souls?*

Now we shall turn to the question indicated in the title of this paper: When we try to sell statistics, are we not selling our souls? 'Our souls' in this case means all that official statistics stand for: Integrity, impartiality, credibility, and the free right of access for all citizens to a common base of knowledge.

Should the CSO perform any job for money? Or should we evaluate the purpose that the user has in mind? An analysis carried out by the CSO on behalf of a customer might try to prove unpleasant theories concerning some particularly weak group, e.g. immigrants. It has been argued that such an analysis should not be carried out. On the other hand, this principle would mean that we come close to political censorship. As the statistical office holds a monopoly on the control of the data, this would threaten the position of the statistical office as the impartial and neutral measurer of social conditions. I believe we should allow the users to make the analysis they want - as long as it is not in conflict with the law. If the users want to carry out analysis that is not valid, the CSO should however reserve its right to officially oppose the results.

Another problem to be considered is whether it is always a good idea to go on increasing sales as much as possible. Are there limits to the proportion of commissioned work that should be undertaken? We know that the proportion of the CSO's production that is sold varies very much from country to country. In Denmark sales amount to more than 30 % of the total budget. Is it dangerous if this ratio would increase to, for example, more than half of the budget?

There is a very real risk that the official statistics might lose its independence, because the CSO would be inclined to consider the needs of the 'paying customers' in stead of the needs of society. This would indeed be a very severe loss of integrity. The CSO must always remember its principal mission and fight to avoid this danger. It can be done. And there is no reason to believe that there is any sacred threshold, e.g. 50%, that must not be passed.

But it is necessary that the CSO retains its full control of the *basic statistics*. In order to secure this, basic statistics should always be financed completely by a state grant, commanded by the CSO. The control should not be sold.

In some countries we have seen in recent years that control of the *basic statistics* has been moved away from the CSO and given to the 'principal customer' in order to make statistics even more market oriented. For instance, the Ministry of Social Affairs would be the principal customer to statistics on social welfare and social benefits. The principal customer then receives the state grant and decides which statistics should be produced and by whom. Even though this will not put

the CSO out of business because the principal customer will probably find it wise to use this office with all its experience as the primary supplier, it is nevertheless a fatal loss of control.

### 5. Problems

It is obvious that increased weight on the marketing of official statistics will give rise to many new problems, as is indeed the case every time a new strategy is applied.

We will see a situation with increased competition between commissioned work and state funded statistics. Which should have priority over available resources? This has been felt as a problem in day-to-day operations, because it is obvious that customers will not accept undue delays in deliverance. But if the marketing is carried out in a reasonable manner, this will not pose any real problem in the long run because the sales revenues will be able to pay for extra resources necessary to carry out the commissioned work. So new staff can be employed if sales rise.

A number of other problems are much more difficult to handle.

#### 5.1. Image

First of all, marketing will be felt as something in conflict with the proper idea of official statistics. It is difficult to get the acceptance from the public and from the principal users of the new role of official statistics. There is bound to be a feeling that 'now they are selling their souls', especially when the marketing is a new phenomenon. To some users, e.g. the Ministry of Finance, it may be very hard to accept that all statistics can not be delivered free of charge as it used to be. It takes hard work and perhaps luck to persuade these users to see that now they can get a lot of useful services that were not available at all before.

It is not any easier to persuade our own staff that marketing is not ruining to our mission. Generations of official statisticians have been brought up with the fundamental belief that statistics should be a public good. For many years marketing tended to be seen as misplaced commercialism. But the internal acceptance is extremely important and must be supported by the management. It must be stressed that understanding of the user's situation is important and that good salesmanship is a desirable behaviour. There must be incentives to sell.

When prestige is connected with sales figures of individuals and divisions, it may on the other hand threaten an important value of a Central Statistical Office: The importance of seeing the CSO as one house. There is a danger that statisticians will fight each other in order to take credit for sales, giving rise to 'local patriotism' or chauvinism (Trewin 1991).

#### 5.2. Pricing

A difficult question is the pricing of statistical services. Which principles of calculation should be employed? Should the CSO charge the marginal costs, or use a full cost principle, or even charge what the market will pay?

Here it is important to consider the market position of the CSO. The CSO is exercising a legal monopoly, having exclusive access to large amounts of data. Therefore it is out of the question to

demand whatever the traffic will bear. At the same time the services are sold in competition with other information vendors.

The principle of marginal costs has had its strong supporters. It has been argued that each customer should only pay for the additional cost accruing from delivering exactly his service. For many years it was discussed in Denmark whether use of computer time should be paid at all by customers because 'the computer was there anyway' and additional use would not cause any costs. But the weakness of this principle becomes more and more evident as the selling of services becomes more important. Eventually the size of the computer will be decided not only by the amount of processing for the general statistics, but increasingly by the processing need of commissioned work. If the CSO does not charge general overhead costs to cover management and infrastructure, marketing will eat up the resources necessary for the basic statistics. This calls for a principle of *average total costs*, calculating unit prices for different resources, e.g. man hours, computer seconds, based on a distribution of total costs in the CSO.

It should also be noticed that when the CSO develops standard systems, e.g. on-line data banks, the price of service from such systems cannot be based on the marginal costs of the last customer, because in this case there would be no money for developing service systems to be used by many customers. Or the resources for such development would have to be taken away from the basic statistics production, thus removing the basis of official statistics. Again, some kind of average cost principle must be used, dividing the total cost of developing the statistical services among all of the customers. When creating the system of standard services, you do not know the number of customers who will buy the service. The development costs may be considerable. So in order to set a price you must try to evaluate demand, presuming alternative price schemes. The unit price should include an amount sufficient to pay interest and depreciation of the total development investment, divided by the expected number of customers.

Once a system for standard statistical services has been created, marginal costs for each new customer will be low and the CSO will gain every time one extra buyer is found. This makes it profitable to invest in active marketing of such products. If the CSO does not succeed in selling the anticipated number of services, there will be a loss.

### 5.3. Copyright

Traditionally, CSOs have not been eager to claim copyright on their products. On the contrary, it is a sign of success if the figures are copied and used many times.

When you sell information services, and especially in electronic form, the issue of copyright has to be addressed seriously. Copying is easy and cheap. If you allow copying and you charge prices higher than marginal costs of copying, you will only have one customer.

A special copyright problem arises in relation to international organisations who receive copies of large amounts of detailed statistics from member states. The international organisations want to put these data to use and offer them to users. They may offer service arrangements similar to those offered by the data supplying countries and there is a real risk of dumping the prices, because the organisations get the data free and they may not have to pursue the same policy of total cost coverage.

### 6. The case of Denmark

The position of Danmarks Statistik is defined in a special Act of Parliament from 1966, granting the institution a high degree of independence, as well as access to primary data for statistics. What is interesting about the Act in relation to marketing is that it provides for the possibility of producing statistics and analyses for the market, allowing user payment to cover the production cost. This kind of provision was quite unusual in its day and opened the marketing of statistical services long before user charges became popular in public services.

In the first years after 1966 the statisticians were of course reluctant to take up the new challenge. Revenue from sales amounted to a couple of percents of total budget. As can be seen from Figure 1, sales began to rise from the beginning of the 1970s and has now reached a level of 30% of total budget.

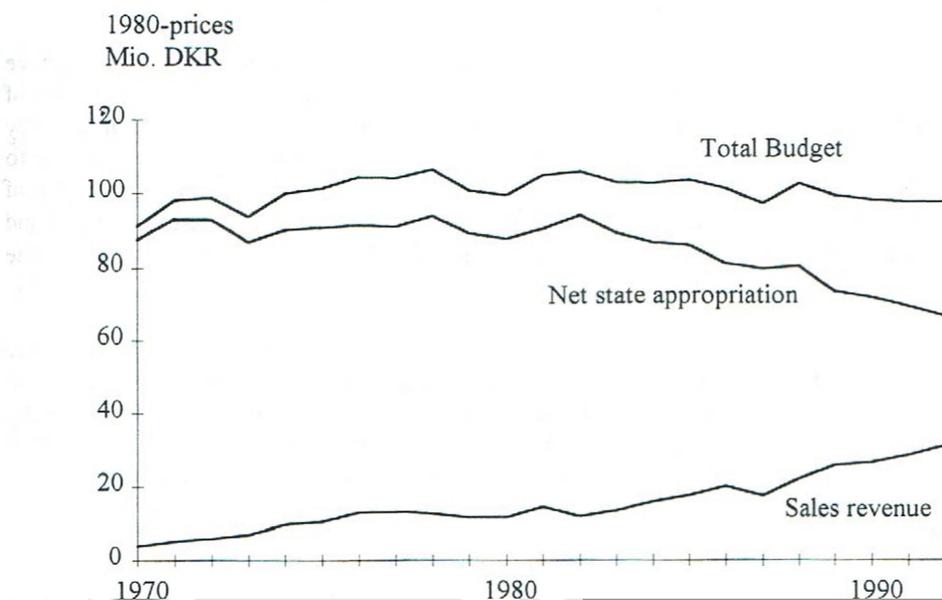


Figure 1. Budget and sales of Danmarks Statistik 1970-92.

In the early days there was no coherent marketing policy. The initiative was left to individual statisticians who were responsible for the production of the basic statistics. But as the market was new and opportunities great, this was enough to produce a steady growth of around 20% per year in real terms for many years. As the sales budget grew in importance, it became harder to achieve such an increase and the real growth rate dropped to around 6 per cent per year from 1977. From that time Danmarks Statistik has gradually put more emphasis on marketing. Systems for producing standardised customers' services emerged and it became common practice to produce sales brochures for service packages.

It may be noted from Figure 1 that the net appropriation from the state, to be used for basic statistics production, has diminished sharply in real terms in the period 1982-92, the reduction averaging 3.4% per year. This development has been halted from 1992 because of growing problems of keeping the basic statistics at an acceptable level.

## 6.1. Which products are sold?

The most important groups of products sold by Danmarks Statistik are shown in the following table.

Table 1. Some important kinds of service. Per cent, 1992

	<i>Per cent</i>
Total sales	100
of which:	
Publications	17.0
Statistical packages	31.3
On-line systems	11.5
Business Register	8.0

*Publications* have of course been sold to the public for very many years but the prices have been extremely moderate, not even covering the bare costs of production, let alone the costs of editing of the articles or the production of the tables. In the past few years there has been a policy to increase prices so they would at least cover total production costs. This has in many cases led to more than doubling the price of a publication. The prices per page are now of the same order of magnitude as that of 'ordinary' publishers, though still on the cheap side. Price elasticity of demand has shown to be considerably below 1, resulting in almost a doubling of turnover in five years. The turnover in 1992 amounted to 1.3 mio. ECU.

In the early days service for customers was produced on an *ad hoc* basis. Today tailor-made statistics still account for a large proportion of sales, and Danmarks Statistik participates in projects carried out by researchers, by Government commissions, etc. But an ever increasing proportion of sales comes from selling *service packages*, where the contents has been decided in advance and the customer buys more or less a standard product. Sales of packages amounted to 31 per cent of total sales in 1992. Two of the most important packages deliver *small area statistics* and detailed *foreign trade statistics*.

*On-line* systems have been marketed since 1980 and are gaining importance. In 1992 they accounted for 12 per cent of sales. Two types of on-line services are marketed: *Data banks*, i.e. large collections of statistical tables which are always fully updated and can be accessed by everyone who can afford such services, and *the Law Model*, which is a special on-line service designed for Government departments to predict consequences of new legislation or amendments to present laws. Historically speaking the Law Model was launched first. The core of the system is a data base of very detailed statistical information, called the Model Populations, needed for calculating the immediate consequences for different groups of the population of changes in tax legislation, social assistance, etc. The data banks came along from the mid-1980's and they have by now around 300 subscribers. The contents of the data banks cover almost all statistics that is published, and it is presented with much more detail and flexibility than can be obtained by other media. The data banks may be expected to be the most important form of publication in the future. Recently the on-line services have been supplemented with CD-ROMs based on extracts from the data banks.

An important item in the sales statistics is sales of addresses from the *Business Register*. This is not really a statistical service but it is one which is carried out by many statistical offices.

### 6.2. Who buy the statistics?

Table 2 shows that Government agencies are big customers of statistical services buying 35 per cent of total sales. An even bigger part of sales, 42 per cent, goes to private customers (non-public sector). In this group we have a large number of customers, many of them buying only small amounts of data. The table shows that sales to private customers have grown faster than sales to the public sector. It is believed that the big potential for future growth in sales lies in this sector.

*Table 2. Revenues by customer group. Per cent, 1988 and 1992*

	1988	1992
Government	42.7	35.3
Local Government	12.3	12.3
European Communities	7.0	10.6
Private	38.0	41.8
Total	100	100

The municipalities account for 12 per cent, and the European Communities account for 11 per cent of total sales, a share that has been increasing. It should be noted that the common European Statistical System of the Communities will have an ever increasing impact on official statistics in Denmark and that the EC is far more than just another customer.

### 6.3. A new marketing strategy

Since the middle 1980s it is felt that more sales do not come without a more vigorous marketing effort. It should be noted that the reason why extended sales are wanted is not just greed; more sales will not solve the budget problem because it will necessitate more costs as well. The reasons for stronger marketing are 1) that we want to allow better use of the data that are already collected, as well as the expertise of the staff, and 2) that a too strong and lasting decline in personnel will have harmful effects on the efficiency of the institute. Some of the reasons why selling of statistics became harder were that public customers were all subject to budget cuts during the 1980s and had to save resources, and that another big customer group, the financial institutions, also witnessed a recession with many mergers of big banks and insurance companies.

Since 1986, Danmarks Statistik has appeared every year at one of the big Danish commercial fairs along with companies selling computer and other services. Especially the on-line data banks have been displayed at these exhibitions. And in 1989 a big marketing consultancy firm was hired to advise Danmarks Statistik concerning the future marketing strategy.

Important points in this new marketing strategy were:

- Get to know more about the market and its needs. This could be done by conducting marketing research surveys, by active contact with customers, and by keeping information on customers organised in an efficient data base.
- Develop products for the market.

#### IN17.1

- Put more emphasis on the private customers. The state and local government have already been quite well looked after by a number of contacts and service arrangements, but there seems to be a large unknown market in private business who do not always know much about statistical services offered
- Use marketing consultants as advisers in marketing campaigns and don't be afraid to conduct more aggressive campaigns
- Restructure the organisation, centralising marketing and sales functions and making it more professional.

In 1990 we conducted two rather aggressive direct marketing campaigns, one relating to foreign trade statistics (1,000 companies), and one related to the 'Market Statistics System' which offers small area statistics to private enterprise (500 companies). Both campaigns involved direct mail with brochures, posters and gadgets (e.g. a toy car) and telephone follow-up. The response rates in both campaigns were around 25% which is quite high compared to general experience with marketing campaigns elsewhere. Some of the potential customers were offered a special meeting or a seminar in order to improve the communication.

The campaigns did not give rise to many new contracts at the moment, but they gave a lot of attention to Danmarks Statistik and its potential. They received quite good mentioning in the papers. Later on there has been a marked increase in the number of Market Statistics customers.

In 1993 there has been a restructuring of the organisation, gathering a large proportion of the marketing activities in one Marketing Office. It is planned to strengthen the ties with potential customers by appointing *Marketing Consultants* and having them visit a number of companies.

#### 7. Conclusions

Marketing is essential to the statisticians' understanding of the situation in which their products are put to use. It is beneficial to the CSOs ability to renew its products and respond to new demands. At the same time, it is extremely important to keep the production of basic statistics intact and under full control of the Central Statistical Office.

**BIBLIOGRAPHY**

- Duncan, J. W. (1988), *The Role of the Private Sector in the Dissemination of Official Statistics*, Proceedings of the 1st Conference of the International Association for Official Statistics, International Statistical Institute, Rome.
- Skak-Nielsen, N. V. (1988), *Marketing of statistical services in Denmark, Iceland and Sweden*, Statistical Journal of the United Nations ECE, Vol. 5, North-Holland, Geneva.
- Trewin D. (1991), *Strategic Directions in Marketing in a Government Statistical Office*, Bulletin of the International Statistical Institute, Contributed Papers, Book 2, Cairo.

**SUMMARY**

While official statistics have traditionally been financed by State grants, it has in recent years become more common that Central Statistical Offices sell a large proportion of their statistics. An advantage that may be reached in this way is that the price mechanism helps in setting priorities and adjusting statistics production to new demands. A precondition is that the CSO has authority to reuse the revenue from sales for producing new statistics.

It is essential that the CSO does not try to sell its *basic statistics*. They must remain under full control of the CSO. It is argued that marketing should be inspired by private enterprise and that prices should be set according to an *average total cost* principle. Danish experience is described, showing that sales amount to 30 per cent of total budget and that marketing is becoming more and more professional.