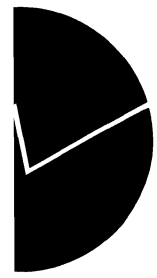


Statistics Norway
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Building Confidence in Statistics
Reliable Statistics in Market Economy
Countries

Documents



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Building Confidence in Statistics Reliable Statistics in Market Economy Countries

Abstract:

Confidence in official statistics is dependent on how the National Statistical Institute (NSI) is organized, the legal framework and how official statistics are financed. Official statistics as a public good, should be a high quality tool for decision making in both private and public sectors. The NSI should be political independent and neutral. This is discussed based on experiences from Statistics Norway. In Norway official statistics are financed both via the Fiscal Budget and by user financing - market revenues. Market revenues help the NSI with user orientation. It is important that market financed projects are integrated in official statistics and that the general confidence is not put in jeopardy by the market activities.

Keywords: Official statistics

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1. Summary

Confidence is crucial for official statistics and is contingent on the users being satisfied. It will also be dependent on the methods used for data collection, quality of statistics, dissemination, the autonomy of the national statistical institute and the history of official statistics. Confidence is discussed here in a legal and constitutional framework, with emphasis on how new ways of financing the national statistical institutes (NSIs), with greater emphasis placed on market-oriented funding, can possibly have an effect on confidence. The discussion is based on experience in Norway.

In Norway as in many countries, official statistics are fairly centralised. Data collection for statistical purposes is provided by the NSI. There is also a growing trend towards using administrative data collected by other government bodies for statistical purposes.

Confidence hinges on the autonomy of the NSI. Statistics Norway is a professionally autonomous institution placed under the responsibility of the Ministry of Finance. The Statistics Act of 1989 regulates official statistics and the activities of Statistics Norway.

The financing of official statistics and the NSI is an important determinant of quality and coverage of official statistics and, accordingly, impacts on the confidence in them. It is important to establish stable funding for the main statistical system. The financial structure should also allow for incentive elements for the NSI to be market- or user-oriented. It is important that the user orientation (market influence) does not create conflict with the role of the NSI as an independent and autonomous institution. Too much emphasis on market activities can influence the NSI's role as producer of official statistics. It is crucial that the official statistics are beneficial to the public.

2. Official statistics and confidence

The term «official statistics» denotes that part of statistics provided by a national statistical service which is deemed to be of general interest, deserving of a stamp of authenticity and justified in being disseminated as widely as possible.

Confidence is crucial for official statistics and depends on how satisfied the users are. Important factors for confidence are:

- the ability to help users make decisions by answering the relevant questions;
- the methods used in data collection and how the obligation of privacy and respect for the response is fulfilled;
- statistical quality, for example, accuracy;
- effective dissemination of statistics;
- the institutional setting and the autonomy of the national statistical institute;
- the history of official statistics.

Confidence will be discussed here, based on experience in Norway. Three important, relevant concepts are used:

- official statistics (mainly statistics published by the National Statistical Institute - NSI - or other government institution);
- the national statistical system (the overall system for statistical work, including institutional and legal setting);
- the national statistical institute - the NSI (in Norway: Statistics Norway).

The quality of official statistics can be characterised by:

- completeness
- relevance
- consistency
- continuity
- accuracy
- timeliness
- user orientation
- availability.

Official statistics should help different players (public and private, companies and individuals) make decisions. It is often said that statistics should be neutral if they are to be accepted as a useful tool for all parties in a democracy. Neutrality is an important but complicated concept. In a democratic society, it is not possible to avoid that occasionally, some political parties will gain more support from some official statistics than other parties. This can be misinterpreted as lack of neutrality. It is important that the NSI does not choose to avoid the most controversial and important issues so as to avoid accusations of being one-sided.

It is important to acknowledge, however, that quality is subjective and statistics cannot capture the «whole truth». Statistical figures will more or less be dependent on arbitrary methodological choices. As in the social sciences, it is crucial to have solid documentation of methods and standards. Users should, in principle, have access to all methods used, and it is important that the statistical methods be valid and reliable. The methods and principles should be published together with the official statistics like a set of "directions for use". Even if official statistics are published with "directions", it is impossible to avoid the misuse of official statistics. Clearing up matters can be tedious work.

It is important that official statistics are easily available for all groups and parties in a society. The value of official statistics to the users increases with the number of users. For official statistics as a good, there is no *rivalness of consumption* - one requirement for *public goods*.

Additionally, it has been said that the message sent out by official statistics should be "clear and visible". It is important that official statistics be an important factor in decisions in the private and public sectors, and that they be made public in a fair manner. This implies, for example, that no data be released before the publishing date. Moreover, publishing dates should be made public and adhered to. At the time of publication, all user groups should be treated equally. And after publication, the official statistics should be available for all user groups.

Official statistics should be a neutral tool for decision-making in the public and the private sectors. It is important that the NSIs do not try to play a political role in the decision-making process. This neutral position can be compromised if, for example, official statistics are published with leading comments. Statistics and the various mechanisms in society are complicated, however. One consequence of this is that official statistics can be difficult to interpret if they are not presented with comments and put in an analytical context. Official statistics which are limited to pure figures are difficult to interpret. Statistical analysis and social research should serve as an interpretation of pure official statistics, made available for the different user groups. Social scientists are, accordingly, one of the major user groups. Moreover, the NSI can include research and statistical analysis among its tasks.

Research and the use of statistics as a tool for social analysis may, however, be regarded as being in conflict with the neutral role of an NSI. Statistics Norway has extensive, important research activity, as provided for under the Statistics Act. The Research Department of Statistics Norway was founded in 1950, and today is one of the most important and largest economic research institutes in Norway. (Statistics Norway also has research activities in demography, social surveys/standard of living, environment statistics and statistical methods.) The scientific results from the research activities are

published by Statistics Norway or in independent scientific journals. It is important for the Research Department to follow academic standards, for example, in evaluating its staff.

Justifications for the research activities in an NSI are:

- feedback on the production of statistics, so as to enhance the quality of official statistics;
- internal research, easy access to data;
- pure statistics are thus interpreted, and their use in social research increases the value of official statistics;
- make the NSI more visible.

Sometimes it is difficult for users to identify from comments in newspapers and other media whether they are based on "research activities" or "official statistics". The common phrase used for both is "Source: Statistics Norway". It is an unavoidable fact that some of the results from research can be controversial, and the inclusion of research activities in an NSI can put some strain on the neutral role of the organisation. The best way to deal with this conflict for an NSI with research activities is not by imposing censorship, but by ensuring that the research activity is of impeccably high quality.

As with the City of Rome, confidence is not built in one day. History and tradition are important factors in public confidence. It is important to be user-oriented, maintain high quality and entrench a solid tradition of secrecy and privacy. The staff of Statistics Norway is proud of its 120-year history of official statistics in Norway. It is fair to say that Statistics Norway has never been seriously accused of leakage of individual data.

3. The NSI in the constitutional system

Formally, Statistics Norway is a professionally autonomous institution placed constitutionally as a government agency under the responsibility of the Ministry of Finance. The role of an NSI is a little different from that of other government bodies such as the tax offices and customs authorities. The NSI is not very administrative or executive by nature, and acts more in line with academic institutions. The NSI is part of the democratic infrastructure.

Two conditions must be fulfilled for an NSI to meet its obligations:

- the political institutions must accept their responsibility to ensure that society will have an independent, first-rate NSI and that official statistics are produced in a cost-effective manner (in terms of both NSI costs and response burden);
- the results published (official statistics) must be completely free of political influence.

To ensure this, it is necessary to establish:

- a legal or constitutional framework
- solid funding.

4. The legal framework - the Statistics Act

The Norwegian Statistics Act was enacted in 1989, replacing the former act from 1907. To prepare the legal framework and the new law, a government commission reviewed the legal aspects of official statistics and the organisation and administration of Statistics Norway.

The act defines the concepts of statistics and official statistics, procedures for statistical enquiries and collection of data, the use of mandatory collection of data from the private sector, and data collection from other public agencies and their administrative data registers. It is important to reduce the response burden placed on the private sector. One way of doing this is to use administrative data for statistics. Administrative data is collected by other government bodies for various administrative purposes. The Statistics Act regulates the co-operation between Statistics Norway and other

government institutions, and the use of administrative data for statistical purposes. Statistics Norway is entitled to comment on how new administrative registers are set up, so as to ensure that the registers will be useful for statistical purposes. It is also imperative that Statistics Norway have the unequivocal right to extract information free of charge from all administrative registers for use in its statistics. Bilateral agreements have been negotiated between Statistics Norway and other government bodies to ensure that the necessary procedures are followed. Close to 50 agreements of this nature have been signed.

One advantage of using registers for statistical purposes in Norway is the common use of ID numbers for both companies/establishments and individuals. Comprehensive statistical files can be obtained by merging files from different administrative registers. It is important to note in this connection that once the files have been merged at Statistics Norway, they may only be used for statistical purposes. This eliminates the responsibility for Statistics Norway as to the running and maintenance of administrative registers. Statistics Norway has an interest in participating in the development of new registers, and attempts to support and give advice to other government bodies. If a government institution wishes to conduct a major statistical survey, it is obliged to inform Statistics Norway in advance so as to enable the latter to comment on co-ordination, use of standards etc.

The Statistics Act regulates decisions on the production of official statistics and the obligation of the public to provide information. Statistics Norway can enforce payment of compulsory fines from respondents who refuse to give information. Some surveys are collected on a voluntary basis.

An important part of the legal structure is the obligation of secrecy. The legal structure and past practice are very important for fostering confidence in Statistics Norway and its surveys. Statistics Norway never publishes or discloses data from which individual information can be extrapolated. When microdata is made available for research projects, ID numbers and other information which identifies individuals are removed. In addition to the rules set out in the Statistics Act, secrecy concerning all kinds of registers with individual information (private and official) is stated and regulated by a special Act on Registers and Privacy. A special government body, the Norwegian Data Inspectorate, carries out this function, and supervises and issues guidelines for data security for the government and the private sector. Statistics Norway must follow strict guidelines and procedures for its data registers. These guidelines could be viewed as being a nuisance for the organisation. The Norwegian experience, however, is that strict rules enforced by an authority outside the NSI foster confidence in secrecy, confidence which is crucial for an NSI.

The Statistics Act uses phrases such as «The King shall decide...». The Act is followed up by decrees and delegations of power. By these delegations, the Parliament conveys on the Ministry of Finance the responsibility for the administration of the Statistics Act. Some decision-making is also delegated to the Ministry of Finance, which has further delegated most of the day-to-day decision-making to Statistics Norway.

5. How to finance official statistics

Official statistics are dependent on solid, stable funding. Statistical systems are dependent on stability and long-term investments in data registers, etc. If there is political controversy surrounding the principles and principal objectives of official statistics, it is easy to see that the financial foundation may be put in jeopardy.

The traditional source of financing Statistics Norway has been the Central Government Budget (the Fiscal Budget). The Ministry of Finance is responsible for the entire Fiscal Budget. It is also responsible to Parliament for the Statistics Act, and thus is also responsible for handling the items (accounts) in the budget allocated to Statistics Norway. Sales of publications, etc., have generated some market revenue for many years.

Some important changes have occurred in the past few decades with respect to budget principles for the Fiscal Budget, and more freedom has been given to government agencies regarding their budget details. As a part of the budgetary changes, Statistics Norway some years ago received more freedom in how to spend its market revenues. Market revenues initially came from publication sales, but now market income has become more project-oriented. More liberal rules on budget allocation between salaries and other expenditures have also been implemented.

The main items from the accounts of Statistics Norway 1990-1995 are shown in Table 1. The market revenues as a percentage of total revenues have increased from 12.9 % to 20.2 %. Most of the market revenue is from assignments linked to statistical projects (1995: 89.5%).

Table 1. Statistics Norway - Accounts 1990 -1995, NOK million

	1990	1993	1994	1995
Total revenues	280.8	310.2	327.5	331.5
Fiscal Budget	244.6	257.0	266.9	267.9
Market revenue	36.2	53.2	62.4	66.8
- from sales of publications			8.2	7.0
- from statistical contracts			54.1	59.8
Market revenue, per cent	12.9	17.2	19.1	20.2

Financing via the Fiscal Budget

The Ministry of Finance has the overall responsibility for the statistical programme and the budget for Statistics Norway. It is fair to say that the Ministry steers Statistics Norway by general targets rather than by details. Another element of the changes in budget principles is the general trend towards a reduction in government budgets. This is a general trend, based on the desire to streamline the public sector. New technology used in data collection and processing is important, as are new methods for the publication of statistics (for example, the use of the Internet).

The activities in Statistics Norway are also influenced by the modernisation of other agencies. One example is the extended use of electronic data capture in Customs. This has dramatically reduced the budget (from the Fiscal Budget) for data punching, used by Statistics Norway to produce statistics on foreign trade.

This traditional funding has been based on the aim of ensuring that official statistics are a fully integrated part of the democratic infrastructure, and are beneficial to the public.

User financing - market revenues

The yearly budget available for Statistics Norway from the Fiscal Budget limits the statistical programme and opportunities for developing new statistical products. To extend the financial limitations and avoid the effects of reductions in the Fiscal Budget, Statistics Norway has been given permission to sign contracts for statistical projects. These assignments cover all areas of statistical work, including data collection, analytical work and improvements in dissemination of existing statistics. These assignments are, in principle, open for both the private and the public sector, but most are with public agencies (90%). An important contract partner is the Ministry of Finance. One premise for this new funding situation is that the other government bodies are entitled to work out financial assignments with Statistics Norway regarding new statistical products.

User orientation

It is important for an NSI to be user-oriented. Statistics Norway may now assign contracts for statistical products, which opens up new possibilities for being user-oriented. User orientation is, of course, also important for that part of official statistics which is financed directly through the Fiscal Budget. Many traditional types of user contacts, such as Advisory Committees, are used. Statistics Norway currently has 27 advisory committees set up for different topics.

User contacts through financial assignments contribute to more binding user contacts. This more binding user influence gives the users more insight into statistical problems and helps them interpret the results.

It is in advance not clear by law or formal rules which part of the official statistics will be financed through the base budget, i.e., the direct part of the Fiscal Budget, or be defined as projects open for contracts. This choice is, to some extent, based on tradition.

Market-financed statistics - part of the official statistics

Assignments are generally made subject to the proviso that the results are to be published by Statistics Norway. This means that the statistics gathered through projects financed by the assignments will normally be published as official statistics and thereby become «a public good». Through these assignments, Statistics Norway invites the users to give direct financial support for projects that will be supplied as public goods. This is rather unusual compared to contracts with, say, a traditional consulting firm. The normal situation is that those who pay the bill will have the exclusive rights to the results, but this is not so in official statistics.

Information about financial sources

Strengthening of user contacts established through different assignments is regarded as a positive experience for Statistics Norway. Some aspects of the general confidence of official statistics should be borne in mind, however. As mentioned earlier, statistics gathered from assignment projects are generally part of the official statistics. It is important that the public be informed about the different financial sources and assignments.

The statistics drawn up in the course of assignments should, in principle, be fully integrated with other statistics. The objective is that all user groups (for example, all political parties) have the same confidence in all parts of the official statistics. This is true even of statistics which are financed by political parties through assignments. If statistics gathered under an assignment (contract) cover fields of high political controversy, the general confidence may, however, be brought into question.

Descriptions of the cost and financing of official statistics

New ways of financing statistics will influence the content and composition of official statistics. It is important to produce balance sheets for the NSI and internal statistics which are useful for a description of how the market-side operations of the organisation influence on the general content of official statistics.

One of the basic ideas behind the centralisation of statistical work in an NSI is the integration and re-use of data, and the use of common classifications, standards, etc. Consequently, all statistical projects (both financed by the Fiscal Budget and by assignment) should be strongly integrated. This integration process is an important part of the activities in NSIs (one basic advantage of a centralised statistical system). From an accounting or auditing point of view, this process of integrating projects creates problems in identifying or linking cost to projects, which creates some difficulties for the auditing and supervision of the contracts.

User financing and the burden to respond

One important duty for Statistics Norway is to balance the response burden with the need for and use of statistics. A decentralised NSI, with an incentive to carry out assignments for new and improved statistics, may well create and sell new statistical products which push the response burden beyond the optimal point. It is also important that the organisation use an acceptable price policy based on marginal principles and not aimed at maximising profits.

Market financing and staff

Norway has a strong tradition of labour protection against dismissals, especially for government employees. This is a consequence of general principles in the Norwegian labour market and stability of the Fiscal Budget. Statistics Norway's market revenues will not enjoy the same stability. If special

staff is recruited to work on assignment projects, it may be temporarily appointed, with a different type of legal protection. An NSI is dependent on having highly-qualified staff so as to foster confidence in its work. It is thus important to be aware of the possibility of a recruitment problem as a result of changed working conditions created by the increase in market revenues.

Concluding remarks

It is important that the NSI and official statistics responds to changes in the user needs. Market financing will be one of many ways to do this. It is however important to be aware of the different quality claims that official statistics should fulfil and that the general confidence can be put in jeopardy if the market financed part of official statistics increases too much. The optimal mixture of market influence and financing via the Fiscal Budget has to be found.

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