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## ON FURTHER DEVELOPMENT OF STATISTICS ON SERVICES IN NORWAY<sup>\*)</sup>

by

Tore Halvorsen  
Division for National Accounts  
Central Bureau of Statistics

In the Central Bureau of Statistics the development of economic statistics on services are given high priority, both on selected activities (e.g. health) and in general to meet the needs and requirements of the national accounts. In this last respect, a major breakthrough was made in 1979 with the establishment of economic statistics on business services. Still, in Norway many activities are not as yet submitted to systematical coverage in terms of economic statistics. This being the case especially in the area of personal and social services. With a view to the CBS's next five-year programme, this paper seeks to present general arguments for the necessity of starting detailed planning for future development of statistics on services. Furthermore, the paper stresses the benefits of having the national accounts play a central role in this process. A view held with long tradition in Norway.

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## 1. INTRODUCTION

The needs of better and more statistics on services have been met with a growing acceptance the last decade. Internationally this has been reflected in the extensive work on the establishment of a service-classification and on the methodology of measuring services transactions. One reason for the growing concern has been the increasing economic importance of the service-producing sectors and at the same time the evident lack of attention directed towards statistics on these sectors. In other words, the growth of the service sectors share of total GDP and total employment, say the last twenty years, has in most countries not been accompanied by a similar growth in resources spent on statistics on these sectors.

Another reason for concern is the heterogenous and complex nature of services which will most certainly complicate the measurement of service-activities. Taken into account, these factors, lack of coverage and the complexity, call for a strategy of development of service statistics.

As with all projects aiming at an expansion of economic statistics, the development of statistics on services activities needs careful planning. There may exist many arguments for this. In general, the absence of a strategy or priorities may very well lead into a "garbage can"-situation. That is, the main objective to have all services activities statistically recorded are agreed upon, but the priorities are more or less decided by random choice.

A second general point is that expecting the budgetary constraints, even cut-backs, in the years ahead, we must more than in the past be prepared to present weighty arguments for the necessity of further development of service statistics, i.e. careful planning and strict priorities will be in demand.

Thirdly, as already mentioned, the complex nature of services and the problems of measurement probably demand more resources spent on methodology compared to statistics on goods-producing sectors. Without a well-founded plan and coordination of this fundamental work, the

development of service statistics will at best still be lagging behind the growing importance of the services activities.

Lastly, one of the most important objectives of statistics on service sectors is to meet the needs of national accounting. The consequences of this objective in terms of planning and co-ordination will be discussed in the following paragraphs.

## 2. CO-ORDINATION OF ECONOMIC STATISTICS WITH NATIONAL ACCOUNTS IN NORWAY

In Norway the main responsibility of producing and disseminating economic statistics is put on the Central Bureau of Statistics (CBS). Ever since the early nineteen-fifties, it has been a declared policy of the CBS to improve existing statistics and develop new statistics with the view of establishing an integrated statistical system. In the case of economic statistics, the essential means in achieving this aim has been:

- (i) national standards for definitions and classifications, and
- (ii) concepts, definitions and definitional relations given in the SNA.

The most important standard concerning (i) is the Standard Industrial Classification (SIC), based on ISIC. Down to the four-digit level, which is the most detailed level employed in the ISIC, the SIC follows, with very few exceptions, the classification employed by the ISIC. A 5th digit, stating subgroups, reflects a national Norwegian level.

Other standards of importance have been the Commodity List External Trade based on CCCN and SITC Rev. 2 and the Commodity Classification for Manufacturing Statistics, also based on CCCN. Only this year, however, both these standards have been revised and are now in accordance with the Harmonized System. They also form the basis for a separate national accounts classification of commodities.

The ideal situation aimed at is that all basic economic statistics

shall be produced by using definitions such as they are given in the SNA. So, it is safe to say that in Norway considerable emphasis has been placed on having the national accounts play a coordinating and integrating role in relation to such basic statistics. A main policy of the CBS thus has been that primary statistics should be established with a view to the needs of the national accounts. Before starting collection of new primary statistics or revising existing statistics of importance to national accounting, the requirements and needs of the national accounts are always evaluated.

There may exist many good reasons for this policy. In general, by seeing to it that economic statistics fit into the system of national accounts, one can automatically ensure that these statistics become well integrated at a macro level. The national accounts, through its utilization of a set of clearly defined concepts, are able to provide the producers of the basic statistics with a consistent framework, within which the statistical information needed to analyse the economic process in all its many aspects can be organized and related.

Furthermore, it can be pointed out that national accounting opens up possibilities for an effective control of the statistical system. The national accounts, characterized as a comprehensive and balanced system, inherit the ability to uncover both errors and blank spots in the primary statistics. This information is reported back to the subject matter divisions so that adjustments can be made.

Yet another reason for the co-ordinating role of the Norwegian national accounts can be found in its key position as the basis for the macroeconomic models used for economic planning, both long-term planning and short-to-medium-term economic policy-making. The macroeconomic models are all designed by employing the accounting framework of the national accounts.

To summarise, the national accounts have traditionally played an important role both as an instrument of co-ordinating and integrating economic statistics, and at the same time the basis for macro-economic modelling and hence governmental policy-making in Norway.

### 3. THE SERVICE SECTORS IN THE NATIONAL ACCOUNTS

The main characteristics of the Norwegian national accounts are

- the integration of annual input-output tables
- the strong emphasis on commodity flows
- the incorporation of detailed specifications, and
- the main emphasis on production, consumption expenditure and capital formation rather than income and outlay and capital finance accounts.

The core of the Norwegian national accounts consists of standard SNA industry-commodity input-output tables. These provide a detailed summary of the supply and disposition of both goods and services. In the final accounts, which are published with a time-lag of 2 years, the number of commodities specified are 1750. Of these, 200 are goods produced in industries other than manufacturing and the remaining 200 are different types of services.

The number of production sectors in the Norwegian national accounts is slightly less than 200. Services-sectors, when defined by ISIC 6-9, count less than 30 per cent of the sectors.

Based on this input-output system, the estimates on value added especially at constant prices for each sector, and thus the GDP, are heavily dependent on the quality of the estimation of each commodity-flow. The apparent bias towards goods and goods-producing sectors combined with the expected growth in the relative importance of the services producing sectors, will eventually lower the quality of the input-output system and gradually lead to a deterioration of the GDP estimates. This of course constitute only yet an argument for further developing service statistics by having the national accounts play the central role in such a development.

#### 4. A SUMMARY: WHERE DO WE STAND

To evaluate the situation in Norway regarding statistics on services, we should employ two criteria or address two questions,

- i) what is the coverage, or for which service sectors are relevant statistics available?
- ii) What is the information content or level of specification in the already available statistics?

As to coverage we can establish that market-oriented service-activities together with government services are better off, i.e. industries classified under ISIC 6-8 and governmental activities under ISIC 9.

For the larger part of these activity categories, statistics are produced and published based on annual surveys carried out by the CBS. Among the activities for which annual statistics are published we find, Wholesale and retail trade, Transport and communication and Business services. For governmental activities annual statistics are compiled based on the government and social security accounts.

To a large extent, however, information on several subdivisions of ISIC 6-8 has been rather scarce. This has especially been the case for most of the supporting activities to transport. Recently, however, plans have been made to start collecting data for some of these activities, i.e. "supporting services to land-transport".

As to specifications in the existing statistics on services activities, we can generally speaking confirm a shortage on product- or commodity specifications, especially when compared to goods-producing sectors. This situation must, of course, to a certain extent be credited the lack of a services-classification. Together with the scarcity of information on output-prices this constitute a severe problem in the computation of constant-price estimates in the national accounts.

For some services producing sectors the way around this problem has been the adaption of the conventional input- or cost-approach to deflating output. The generally recognized disadvantage of this approach, i.e. the problem and need of estimating growth in productivity,

has to a certain degree been compensated by means of stratification. The level of specifications in the basic statistics is, however, the main obstacle to further development of this method. For other service activities the constant price estimates are arrived at by using either consumer price indices or changes in employment or other volume measures.

To summarize, a further development of service statistics in Norway should involve an extension of the coverage of activities, mainly the industry part of ISIC 9 and several subdivisions in ISIC 6-8, a more detailed level of commodity specifications on both outputs and inputs, and also information on output prices in service sectors.

## 5. TOWARDS A STRATEGY

The fundamental aspects of a strategy will be raising the right questions or issues. When it comes to a strategy for developing service statistics, the questions to be raised should be :

- i) What information is needed (i.e. which activities and variables must be covered)
- ii) Which frequency for data collection should be chosen (quarterly, annual, bi-annual)
- iii) Which method should be employed to collect the required information (censuses, surveyes, exploiting administrative registers)

These fundamental issues can not be viewed isolated from each other and moreover should be closely linked to an evaluation of the requirements of the national accounts.

The work in the CBS is guided by five-year plans, the prevailing covering the period 1986 to 1990. Being in the initial stage of preparing the next 5-year programme, the National Accounts Division will prepare papers presenting its preferences for new or improved statistics on services. These views will be thoroughly discussed with the statisti-

cal divisions of the CBS and further considered throughout the plan preparation. From a national accounting point of view, these preferences will be directed towards the aim of establishing primary statistics for all service-producing sectors not covered as yet. This information should include all the well-known variables, i.e. turnover and intermediate consumption by commodities, wages, employment (hours worked), investments as well as information on output prices.

All data should be available in time to be incorporated in the final national accounts, i.e. latest one and a half year after the year of accounting. The compilation of preliminary annual and quarterly national accounts will require short-term indicators on these variables, like total output and cost indices, including wages and also price indices. Furthermore, indicators on investments should be collected.

Admitting the more complex nature of services than of goods and hence the difficulties in measuring service-producing sectors, much effort will have to be put into the methodology aspects of data collection. The problems of choosing unit of output is well known and will have to be dealt with in parallel to the introduction of the new product classification (CPC), realizing this classification representing the most advanced tool in achieving a more detailed level of service specifications. In this field the CBS should be at close hand to the work carried out at the international level.

Many service-producing sectors are characterized by a larger share of small units and a tendency to expand or contract with a greater pace than goods-producing sectors. This performance, which in Norway the last ten years has been most apparent for business services, only calls for more careful planning considering a strategy on sampling. Work in this field has already started in connection with the construction of a short-term activity indicator for business services.

In order to ensure uniformity in so far as the statistical units and the classifications are concerned, the CBS keeps a central register of establishments and enterprises to be used by all subject-matter divisions applying to such a register. As a consequence of statistics not



being produced for many of the service sectors, the maintenance and up-dating of the register has over the years been given lower priority as far as these sectors are concerned. A fundamental condition behind the development of statistics on services thus must be an improvement of the central register. One important aspect of this requirement is the possibility of having the register kept by the CBS connected to and harmonized with other administrative registers. Such a development would not only secure a higher efficiency in administrative data collection in general, but assumably also secure a maximum use of administrative information in producing economic statistics on services. Indeed, a recent governmental study strongly recommends such a harmonization between various registers.

A further development of statistics on services calls for more resources spent in this field, either by financing through external sources or by adjustments within the prevailing budgets. In Norway, we probably have to face budgetary constraints at least in the next few years. In this situation we must be prepared to raise the question of redistribution of resources. Keeping in mind the imbalance of efforts put into statistics on goods-producing sectors relative to service-producing sectors, and the corresponding wealth of information available in the goods area relative to services, we should by no means refuse the idea of redistribution of resources, i.e. having more information on services even at the expense of less data on goods. In fact the CBS has already taken steps in this direction by simplifying data collection concerning inputs in the manufacturing statistics. Although we might argue that a cut-back on information related to manufacturing will affect the national accounts in a negative way, the prospects of having more and better information on the services sectors, will probably altogether improve the national accounts estimates.

One last aspect to be mentioned concerns the matter of organising data collection and statistics production within the CBS itself. At present, the divisions in charge of service areas not covered by economic statistics (health, education etc.), have less experience in collecting and producing data relevant to national accounting. This raises the question of the desirability of having a broad department respon-

sible for all economic statistics in the area of non-governmental services (perhaps leaving out trade and transport). Such a reorganisation would probably make the work of coordination some easier and thus ensure consistency in the statistical treatment of the various service activities.

## 6. CONCLUDING REMARKS

As previously stated, the CBS are at the outset of preparing a long-term programme for the period 1990-94. Faced with scarcity on resources, we should hardly expect the next few years to provide us with exhaustive statistical information on services. On the other hand we should not be entering the coming decade without a well-founded strategy on the further development of services statistics.

In the preparation and implementation of such a strategy the needs and requirements of the national accounts will be evaluated. This seems the most consistent way of bringing us closer to the ideal situation of having a fully integrated statistical system describing the many aspects of the economy and its development. In other words, only this way we can ensure the best possible estimates on indispensable economic aggregates.