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# TOPICAL PROBLEMS OF SERVICE STATISTICS IN CZECHOSLOVAKIA

(Information report to point 9: National experiences in developing structural and short-term statistical information on services)

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# TOPICAL PROBLEMS OF SERVICE STATISTICS IN CZECHOSLOVAKIA

(Information Report)

## I. Introduction

Similarly with other statistics also the service statistics in Czechoslovakia was developed in the past primarily for the needs of centrally planned management of national economy and was concerned primarily with the data needed for the monitoring of the plan fulfilment. Generally speaking, the focal point of the development of national economy consisted in its industrialization, primarily by the development of heavy industry, so that the service statistics was in the background of interest to a considerable extent. The past development has resulted in the fact that the general lag of the service statistics behind the statistics concerned with goods production, observed on the world scale, applies to Czechoslovakia to a much larger extent, particularly in the field of measurements of the output of services of nonmaterial character. Moreover, the individual statistics, incl. the service statistics, developed in accordance with national needs and ideas without proper relation to the development in other countries.

Social changes taking place in Czechoslovakia will manifest themselves necessarily also in the renaissance of the whole statistics. The necessary measures to this end are already being in progress. Czechoslovak statistics intends to utilise maximally the experience of developed countries for the restructuring and further development of the individual statistical branches. This applies appropriately also to the service statistics.

Apart from conceptual, contents and methodological problems particularly serious problems are arising in Czechoslovakia in the field of data collecting, where the methods used until the present day will have to be reconsidered. The same applies also to the problems of data processing. This paper, therefore, is concerned mainly with these problems and with a short description of the contemporary short-term statistical information system on services.

# II. Contemporary State of Service Statistics in Czechoslovakia

## a) Definition of Service Statistics

Similarly with other countries there is no single, fixed definition of services in Czechoslovakia. Statistical practice applies several concepts and definitions of services: therefore, also the term "service statistics" may be different in dependence on the purpose and objectives of the respective surveys.

The summary blanket concept of the service statistics could consist in the concept used by the Czechoslovak balances of national economy, based, however, on MPS. In this respect particularly two national classifications are significant, separating goods and services: The Standard Classification of Industries and Products (classifying goods) and the Standard Classification of Performances (classifying services). In the framework of MPS, however, only a part of services appears on the production side, viz. the services of the so-called productive character. principally only the services concerned with the preservation. renewal or improvement of use-value of material wealth or with the displacement or circulation of products. Typical are particularly repairs and maintenance of machines, repairs and maintenance of construction character, operation and management of communications, distribution of energies, services provided by freight transportation, telecommunications, trade and public catering, etc. The classification serves primarily as a certain theoretical concept; in statistical practice, however, some approximative approaches are frequently applied. speaking, the classification of data into production and nonproduction sectors was of greater importance in the contemporary MPS system than the classification into goods and services. In this part of the balance services do not appear as a separate item of the sector of services, but as the respective production branches (e.g. trade and public catering, freight transport and telecommunications, etc.) or are incorporated in the branches producing goods (e.g. repairs and maintenance of machines and other production equipment in the individual manufacturing branches, as a rule, etc.).

Standard Classification of Performances contains, naturally, also other components of performances, viz. the ices of the so-called non-productive character incorporating, accordance with the contemporary Czechoslovak classification system, various operational services (passenger transport, accommodation services, tourist services), social services (education, culture, health service, social welfare, physical training sport), personal services, business and financial services, These services do not appear on the production side of the balance. In practice the term "services" is sometimes reduced to the services of this type only. However, also the balance of performances of the non-production sphere is compiled currently. which in Czechoslovakia is based on the cost approach. In the framework of another balance - the balance of monetary income and expenditure of the population - the item "Population payments for servcomprises all services, but only in the extent of the called paid (market) services; in this case the concept of services approaches methodologically the monitoring of expenses services used in the framework of family budgets. A detailed description of the Czechoslovak classification system of services its application in the framework of balances of national economy as well as the extent of data available in this field was included in the reply to the questionnaire on the concept of the service statistics, addressed to the UNSO in April, 1988.

At present work has begun on the restructuring of the system of balances of national economy (MPS) and implementation of the SNA or its application used in the framework of the European Communities - ESA into Czechoslovak statistical practise. In this context also the definition of services will be fundamentally revised, indubitably. The work is in its initial phase at present and it would not be useful to deal with the problems arising in connection with this restructuring in this paper. It follows from the previous computations of the GDP of Czechoslovakia in the SNA methodology, as well as from the balances of performances of the non-production sphere, that the number of the greatest problems will include particularly the pricing of services of non-market character, typical primarily of the operations of non-production branches.

A little different is the concept of the statistics of services used in the framework of current statistical information system, e.g. in the field of employment. In that case the classification is based on the national Standard Classification of Branches of National Economy and the application of the Standard Classification of Performances for the classification of individual specific operations (activities). In this case also a plurality of notions of "services" is used, often based on the widest concept of services comprising practically all branches with the exception of the so-called primary sector (agriculture, forestry, mining) and the secondary sector (manufacturing construction). Consequently they are the branches corresponding with the single digit classification of 6-9 ISIC 1968, or the letters G-P (two digit characters 50-95) ISIC, rev. 3; in this concept the ratio of employment in services, for instance, slightly exceeds 40 % in Czechoslovakia. In some cases, in connection with the balances and the Standard Classification of Performances, this wider concept is used, but the services do not include some activities of production character, such as trade, freight transport and telecommunications, etc. or, on the contrary, in connection with further performance indicators, also certain organizational limitations are used in current statistics (e.g. services performed by communal organizations and cooperatives).

It follows that even recognising the principle of the possible different approaches to the definition of the term "services" for various information needs certain methodological work on a more accurate definition of services in Czechoslovak statistics will be indispensable.

### b) Contents of Surveying

Apart from value data in the framework of the balances of national economy the current statistics of services in Czechoslovakia is concerned also with a number of other data particularly for the purposes of short-term assessment of the extent, structure and development of services. Their number includes, on the one hand, the data ascertained quarterly on the

output, costs, and economic results in the field of paid services (i.e. principally excluding the budgetary organizations financed from the State budget), on the other hand the data on employment, wages, investments, fixed assets, etc. for all types of paid and unpaid services (the latter in annual periods).

A place apart among them is occupied by the data ascertained in physical units, characterizing, as a rule, the performance (capacities) of the individual branches as well as some consumption classified in considerable detail, as a rule. Some are ascertained in quarterly, many only in annual periods. They concern, as a rule, the operations of services of all types, particularly transport, telecommunications, home and foreign trade, tourism, communal, personal and housing services, education, culture, health service, social welfare, physical training. A minimum of data of this type is ascertained by state statistics in the field of business services, insurance and financial services, state administration and some others.

The data in value terms are used for regular economic reports prepared by the Federal Statistical Office every quarter and submitted in these periods to Government and other institutions; the data in physical units are used for the assessment of the social and economic development in longer views or in the framework of various specialised analyses. The data of this type are in great demand and form and integral part of the statistics of services. So far there has not been sufficient bond between the current service statistics and the balances of national economy; in connection with the transition from MPS to SNA consistent links with the national accounts will be necessary.

# c) Forms of Data Collection

The data of the statistics of services are obtained from several sources; the most important among them are the enterprise surveys. This applies both to the data collected for the balances of national economy and, particularly, to the data ascertained for the purposes of current service statistics incl. short-term information.

The existing method of data collection had the advantage of exhaustive form of statistical surveying enabling statistical recording of the operations of all units in the field of services. Some branches, such as education, health service, transport, etc. used also their respective branch information system networks for this purpose. These exhaustive forms of surveying were enabled in the past by the practically exclusive form of state and cooperative ownership with a relatively firm organizational arrangement of units and their adequate number, enabling data collection and processing in the full extent of these units.

Sampling forms of surveying were used in some special cases only, e.g. in the case of family budgets.

# III. Problems Arising in Service Statistics in Connection with the Transition of the Economy

#### a) Development of Small Firms

Apart from the above mentioned methodological problems concerning the concept and contents of the service statistics, connected with the transition from MPS to SNA or ESA, serious difficulties begin to arise in the field of data collection in connection with economic changes, particularly in the cases when data collection was based on exhaustive enterprise records.

At present new phenomena are originating in Czechoslovak economy signalling the urgent necessity of changes in the form of data collection. The number of these new phenomena includes in particular:

the proceeding demonopolisation of existing large state organizations, manifesting itself by the disintegration of the existing structures of organizations and the origin of a large number of minor and small enterprises; although these changes take place primarily in the goods producing branches, these phenomena begin to become typical also of a number of service branches;

- the privatization of the enterprises until now in state ownership and their transformation into joint-stock companies or other similar types or organisations, possibly including their transfer to individual private ownership which, in its consequences, may result also in deteriorated prerequisites for the proper fulfilment of information duties in the full extent of required data;
- vigorous development of small cooperatives and particularly in this very phase of numerous small private enterprises and firms which with their frequent changes (origin and cessation of enterprises) together with the recording problems (in principle they keep only very simple books) will make it impossible to carry out the existing exhaustive surveying by contemporary methods.

# b) Measures Taken for Data Collection

Czechoslovak service statistics reacts to these new phenomena so far by the following interim measures:

- a) the contemporary exhaustive quarterly or annual reports in the field of paid services concern only major organizations employing more than 100 people, regardless of the form of ownership and the legal form of enterprise;
- b) minor state enterprises, small cooperatives and small private enterprises registered in the Company Register, with less than 100 employees, fill-in a simplified form in annual periods (characterizing, however, by several selected indicators, the output of these organizations, employment, wages, etc. in quarterly periods); so far also in an exhaustive manner;
- c) small private firms not registered in the Company Register (with a maximum of 25 employees as a rule) have been exempted from information duties for the time being; statistics draws the necessary data, in a considerably limited extent, from their annual income tax declarations they are obliged to fill with their respective district tax offices.

Some specific data collection problems connected with the transition to SNA will have to be specified and solved in close connection with methodological changes.

# IV. Plans for Restructuring and Further Development of Service Statistics

In the first place it will be necessary to define newly and clearly the notion of "services" which should be based on the definition used in the framework of the SNA with permissible purpose-oriented modifications. This is closely connected also with the definition of the statistical unit which, on the one hand, should be uniform - as far as possible - for all monitored kinds of indicators (production, financial results, employment, etc.); on the other hand it should respect the possibilities of acquisition of the data for these indicators.

Furthermore, there are urgent problems of data improvement with regard to their contents and particularly their methodology, in the first place volume measurement of non-production character and particularly of non-market operations. These problems will be solved in the framework of the prepared transition to SNA.

Particular stress will be laid on the change of the form of data collection. In any case it will be necessary, in a number of operations of services, particularly those carried out by a great number of small units, to abandon the exhaustive forms of data collection and to adopt selective surveying in organizations while using some results of the prepared sample surveys of the population, such as LFSS, etc. Obviously it will be useful to combine these sample surveys with exhaustive enterprise surveys in several years periods.

The transition of Czechoslovak economy to market economy is only in its initial stage: consequently, there is not enough experience with its progress and the possible problems in the field of data collection and processing. The final form will depend on the further development of Czechoslovak economy in which Czechoslovak statistics intends to utilise maximally the experience of advanced countries.

Annex to the paper: Topical Problems of Service Statistics in Czechoslovakia / Session 9 of the provisional agenda/

#### Czechoslovakia:

QUARTERLY SURVEY IN COMMUNAL AND PERSONAL SERVICES /market services only/

Economic variables:

## I. Structural characteristics of the units

- number of enterprises
- number of local units
- division of the enterprises according to the number of persons employed

### II. Data on employment of the units

- number of persons employed
  - . part-time workers
  - . homeworkers
  - . invalids

## III. Accounting data on the units

- turnover -
- sales
  - . goods
  - . services
  - . exports by territories
- expenditure
  - . material costs /purchases of goods and material services for

sales or intermediate consumption/

- . wages and sallaries
- . other expenses
- value added
- operating surplus, loss
- fixed assets
  - . depreciation
- stocks
  - . raw material
  - . work in progress
  - . finished goods

# IV. Production of goods and services /in physical terms/

- goods by individual product items /on annual basis only/
- services by individual service items

#### NOTE:

- 1/ On annual basis selected indicators are reported in detailed breakdown by 7 groups of branches /one-digit national classification system/, 26 branches /two-digits/ and approximatively 40 sub-branches /four-digits/, based on kind-of-activity units. There are: turnover, total sales, persons employed and wages and sallaries
- 2/ Quarterly survey in service statistics is accompanied by several other specialized surveys on qurterly or annual basis - employment and wages survey, tangible investments survey, fixed assets survey and financial survey with detailed breakdown of respective items.
- All enterprises listed in the administrative registr of firms are registred at the same time in the statistical registr of reporting units under special statistical identification code along with neccessary characteristics /branch of activity, kind of ownership, legal form of organization, region, number of persons employed and many others/ enabling requested classifications of the units. The same applies to small firms not registered in the administrative registr, the statistical registr being based in these cases on annual tax declarations. The registr is updated on monthly basis.