

A NOTE ON THE CONCEPT OF SERVICES

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Not one of the many service definitions proposed by various authors and applied in practice enjoy general acceptance. Is it feasible to reach an international agreement on the definition of services? The answer is probably yes; however, is it worthwhile to spend considerable resources to reach such an agreement. Does an overall services aggregate indeed provide important analytical uses? Many doubts are expressed in this respect. Authors of recent international work on the statistics of services tend to accept a more flexible attitude: instead of having one single definition on services, several service concepts could be applied depending on feasibilities and other circumstances of the various statistics. However, all service definitions should be based on the International Standard Industrial Classification (ISIC) and on the Central Product Classification (CPC), recently approved by the Statistical Commission of the United Nations.

1. INTRODUCTION

It can hardly be contested that the role of services in economic and social life has substantially increased since the middle of the century. If services are more important, statistics have to tell more about them. However, the first basic question encountered in this context is what are services and how they can be defined?

The System of National Accounts (SNA) has a relatively well elaborated definition for *goods and services*. This definition delineates services quite well from such flows as factor incomes, transfers, capital gains and losses; however, it does not separate services *from* goods. This relates not only to SNA. Strangely enough, there is no international recommendation filling this gap. The lack of an internationally agreed upon definition on services does not prevent researchers (and also statistical agencies) from publishing abundant statistics on the share of services (in terms of GDP or employment). However, it is questionable to which extent these statistics are comparable. Often various statistics on shares of services contradict each other.

This is why several years ago international organizations were urged to agree upon the concept of services. The Statistical Office of the United Nations (UNSO) prepared the first note on this subject in 1987. Somewhat later, information was collected from national statistical offices on this matter by a questionnaire, circulated jointly by the UN and the IMF. On some of the related issues views are converging, on others it is still not clear what conclusion is to be drawn.

The present note tries to summarize the state of affairs on the concept of service issue. The paper draws on the work of the UNSO, although its content is the sole responsibility of the author.

II. EARLY EXPERIENCES; SERVICE DEFINITIONS BASED ON ONE SINGLE CRITERION

At early stages of the work on service statistics most of the attempts to define services were based on one single criterion. Neither of these attempts enjoyed general acceptance. Let us have a short review on these "one dimensional" definitions, without going much into detail.

Services are intangible, while goods are tangible. This is true for most cases, but not for all cases. Main criticism: at the end of a number of service activities there is something tangible available. For instance a photo (end result of photographic services), a study (end result of advisory services). Additional criticisms: the tangible character of some goods (like electricity) can also be questioned.

Services cannot be stored (they are produced and consumed simultaneously), while goods can be stored. Again true for most cases, but not for all cases. There may be a considerable time span between the compilation (production) and utilization of an advisory service.

Services cannot be transported/transferred and must be consumed at the place of production. This may have been generally true a long time ago, but with the development of modern information techniques, this definition does not seem valid any more.

Services are "changes in the condition of a person or of a good belonging to some economic unit, which is brought about as the result of the activity of some other economic unit with the prior agreement of the former person or economic unit." The merit of Hill's (1977) definition is that it is based more on economic than on formal (e.g. transportability) characteristics; however, by itself, this definition falls short of distinguishing services from goods since, for instance, a purchased video tape (a good) may cause the same "changes" on/to a person as a transmitted television programme (a service). Furthermore, what is a change in the conditions of a person or a good is open to different interpretations: for instance preventive services (e.g. police, firemen, guards) are in fact trying to prevent change from taking place in the conditions of a good or person.

Ten years later Hill complemented his earlier definition by pointing to an important economic characteristic of services: the contact between producer and user of services. "... it is inherent in the idea of a service that it should be provided *to* some economic unit. In this context the verb provide always carries an indirect object as well a direct object, explicitly or implicitly. This is a marked contrast to goods production where the producer may have no idea who will acquire the goods on which he is working. A farmer may grow crops in complete isolation from his eventual customers, but a teacher cannot teach without pupils" This explanation is very useful for understanding some important economic characteristics of services (e.g. why service producing units are generally relatively small in comparison with goods producing units), and it casts light on the treatment of some borderline cases (e.g. why postcards are goods while photos are services). However, again it cannot serve as the unique underlying criterion for the distinction. In a number of cases, even in goods producing industries, there are similar contacts between the producer and user, e.g. individualized options in specifying car characteristics or purchase of tailor-made clothing.

The tailor-made clothing brings us to another criterion often mentioned in distinguishing goods from services. It is argued by some authors that small alterations of a product, which do not make a new product from the old one should be treated as services; on the other hand, large alterations, which create new products from the old ones should be considered a production of goods. On this basis e.g. repairs are treated as services, but tailoring (the production of suits from fabrics) as production of goods. This criterion applies only to one part of services; it does not work for transportation, communication and generally to those services which cause changes in the conditions of a person. In addition, in a number of cases it is difficult to determine whether an alteration is small or large.

It is often argued that services are more labour input intensive and less intermediate input intensive than goods. This, as a general rule, is true; however, this is a characteristic of services rather than a criterion for distinguishing them from goods.

III. SHIFT FROM ONE CRITERION TO SEVERAL CRITERIA

All of the attempts to define services on the basis of one single criterion, as described in the preceding section, have contributed to a better understanding of the nature and character of the services; however, neither of these attempts enjoys general acceptance. This is why at a later stage of the international work on service statistics the UNSO attempted to find a solution based on several criteria defining the scope of services.

In the beginning of 1988 a joint UN/IMF questionnaire was circulated to national statistical offices in which views on the one criterion/several criteria issue were sought. An overwhelming majority (almost 90 percent of the respondents) supported the several criteria approach. Since the questionnaire did not ask for specific details (e.g. what should be the hierarchy among the various criteria, what should be the general rule if several criteria contradict each other), no indications were received as to how this several criteria rule should be interpreted. Many of the replies, however, recognized that there will be a number of borderline cases where practical circumstances also have to be taken into account and that the adoption of a number of conventions seems to be unavoidable.

It is, presumably, right to draw the conclusion that the several criteria approach is generally accepted. If so, the next step is to work out this principle operationally and to delineate services from goods within the whole "goods and services" category. This is not an easy task; however, it does seem to be feasible. The most promising course could be to take the Central Product Classification (CPC) and to determine for each of its categories whether they belong to goods or services. If necessary, some of the smallest categories could be split between goods and services. This whole exercise should be preceded by establishing some general principles as to how to treat conflicting situations and borderline cases (e.g. which are the typical cases where the tangibility should play only a secondary role).

It is likely that on some of the borderline cases views will differ. However, these types of difficulties are encountered in respect to most statistical recom-

mendations. The most expedient procedure would be to prepare a draft proposal (by the UNSO, or by several international organizations jointly) and to discuss it at regional and/or expert group meetings.

Before launching this programme, however, there are number of questions which must be answered. Is it indeed worthwhile to work out an internationally agreed upon definition for services? What analytical uses can such a service definition provide? Is it feasible to use the same service definition throughout the whole statistical system? These questions will be considered in the next section of this paper.

IV. DOUBTS EXPRESSED IN RESPECT TO THE UNIQUE SERVICE DEFINITION

The number of countries that questioned the usefulness of a unique service definition was relatively small in the joint UN/IMF enquiry. The Netherlands and Hungary were the two countries which expressed the most doubts in this respect; some objections can also be found, however, in the replies of Australia, Czechoslovakia, France, Greece, Norway and the Philippines. Eight countries out of the sixty or so responding countries is a relatively small proportion. However, the arguments given are worth being considered. In this section the arguments given against a unique service definition will be summarized, without identifying which argument was given by which country.

The first question addressed by some of the critics is what analytical usefulness can one expect from an overall service aggregate? The concept of services is a very heterogeneous aggregate. One can find the most modern activities (like some telecommunication services), but also the most traditional activities (like domestic services). Some services (e.g. haircuts) are the most labour intensive, others (like air transport) are very capital intensive. Some services (like telecommunication services) become relatively less expensive with economic development, others (like repairs, beauty salons) relatively more expensive. When a country moves from a centrally planned economy into the direction of a market economy the share of some services (e.g. financial services) increases, while that of others (e.g. public administration) decreases. Does the concept of an overall service aggregate express something that is markedly characteristic? (The corollary of this question is: does the concept of an overall goods aggregate express something that is markedly characteristic?)

Another group of counterarguments centers on the incidentality that influences whether a given thing/activity is treated as a good or as a service. Refrigerators purchased by households are clearly goods. Refrigerators which are provided by a landlord (as fixtures) are parts of a service. If a family which has two refrigerators, one which they purchased and one which they hire with the apartment, and if they take out a meal from one refrigerator and put it into the other, are they shifting their consumption from goods to services or *vice versa*? Of course, this last question has only a symbolic character; however, its general importance is connected with the fact that important shifts may occur between owing and hiring both in the consumption and production sphere.

Other examples on incidentality: a sandwich purchased in a retail shop is a good; however, the exact same sandwich purchased in a catering establishment

(like MacDonald's) is a purchase of service. The generalized message of this example is that whether a thing purchased is treated a good or service depends on in what kind of unit (in which circumstances) was it purchased. A building constructed by one single contractor is production of a good, and the whole value added created by this process will appear as goods producing value added. However, the value added of the same building if constructed in a main contractor/sub-contractors arrangement will appear as created partly or mainly by services. (At least according to those views which consider that sub-contractors provide services to the main contractor.) This again is a more general problem than relating to construction only: contracting out some activities previously carried out by a goods producing enterprise makes them services without any change in the activities themselves. Or, if an ancillary unit (e.g. that of providing accounting or computer services within a manufacturing enterprise) starts to sell a substantial part of its services outside the enterprise, the whole of these services, including those which are used within the enterprise will be treated as service production (since the ancillary unit will be promoted to the rank of a separate establishment; before the change, ancillary activities were not separated from goods production).

One of the main uses of the overall service aggregate (or maybe the only use of it) is to demonstrate how the importance of services within the national economy increased (e.g. in terms of the GDP). However, is this information, e.g. that the share of the services in a given country increased from 55 to 60 percent within the whole GDP, to be interpreted at its face value? One should note that in this increase various and by nature very different factors could have contributed:

- real shifts from goods producing activities to service producing activities (e.g., relatively more educational or medical services are produced, and relatively less food);
- services become more expensive relative to goods (e.g. the prices of hairdressing services increase faster than the prices of clothing);
- the same activities are provided as before, only a larger part of them is contracted out;
- activities which earlier were treated as secondary or ancillary activities (and therefore, not separated from the main activity of the enterprise) are treated in the next period as produced in separate establishments (either because of organizational changes, or simply because more information is available for distinguishing separate establishments).

A further doubt expressed in respect of the usefulness of a unique definition is the question of whether, indeed, the same service concept can be applied in all fields of statistics. The most controversial seems to be the issue of whether or not one can achieve having the same service concept applied in external trade statistics as in domestic transactions. As far as one can judge from the results of the joint UN/IMF survey, there are two kinds of objections. First some countries argue that in external trade statistics the most they can do is to separate merchandise transactions from non-merchandise transactions. Since in this separation statistical feasibilities play the primary role (does the good or service pass customs registration), this distinction does not coincide with the goods-services distinction as used in domestic statistics. Just one example: newspapers in domestic statistics

are goods, but foreign newspaper subscriptions (since they do not pass customs registration) belong to the non-merchandise trade. Nevertheless, since most merchandise is goods and most non-merchandise is services, one can conceive the merchandise—nonmerchandise distinction as some kind of approximation of the goods-services distinction.

The second objection comes from those who claim that there is a need for a goods-services distinction in the external trade statistics, in addition to or instead of the merchandise–nonmerchandise distinction. However, the distinction line they are proposing for the external trade goods-services separation is not exactly the same as that which they propose for separating domestic transactions. Practical limitations are mostly argued, but not exclusively. For instance, construction activities carried out abroad are suggested by the majority of the replies of the joint UN/IMF questionnaire to be treated as services (in spite of the fact that most of these countries in domestic statistics treat construction as a goods producing industry). A third group of countries insists that the definition of services in external trade should be exactly the same as in domestic transactions. However, there is not yet sufficient evidence of how this objective can be achieved in practice.

It should also be noted that the goods-services distinction, if done on the production side of the accounts and on the expenditure side of the accounts, will not amount to the same shares, even if exactly the same definition is applied for services on both sides of the accounts. On the production side the distinction is made on the basis of whether the value added was produced in the goods-producing activities or service-producing activities. On the expenditure side, however, the distinction criterion is whether the final product when used, is considered as a good or a service. For instance a television set purchased by a household is treated as consumption of a good, including the transport and trade margins and other services embodied in the retail value of the television set. The latter activities on the production side are treated as production of services. Similarly the amount paid for a meal consumed in a restaurant is treated in the final expenditure statistics as a purchase of a service; however, in the production statistics the value of the agricultural and food industry products embodied in the price of the meal was produced in the goods producing industry. (It should be noted, with the help of inverted input-output tables it would be possible to present goods-services expenditure categories which are distinguished on the basis of where the value added was produced; however, this is not customary, and most of the expenditure goods-services distinction are based on the final form of the product.)

Finally, let us consider the role of the service definition for some specific (nonstatistical) purposes. Some participants at the Group of Negotiations on Services (GNS, GATT) argued that before any agreement can be signed on the liberalization of service trade, a clear definition of services is needed. While it is entirely true that any agreement must clearly define the scope of its validity, it is very doubtful that this is the overall service definition which would be needed for the GNS. Most likely the agreement will not relate to all kinds of services, e.g. excluding those which are unimportant in external trade. It is also possible that it will cover some activities which in the SNA are treated outside the scope

of goods and services (e.g. factor payments like license fees). Consequently, it may be highly important for the GNS to have good definitions for particular types of services from the Central Product Classification (CPC) or from the Standard International Trade Classification (SITC), it is hardly likely that a unique overall service definition would be helpful for the trade negotiations.

V. QUESTIONS TO BE ANSWERED AND OPTIONS

Summing up the request made, the views expressed and the comments received in respect to the concept of services issue, we can characterize the present situation as follows.

- Nobody seems to deny that a definition which separates services from goods would be of some use; however, as to the relative importance of this definition, views are divided. Some consider that such a definition would be very important in the development of service statistics, others think that it is not of primary importance or is not indispensable.
- Such a definition, at least *an internationally agreed upon* definition of services, does not yet exist. To work out this definition appears feasible, although not very easy, since the number of controversial borderline cases is relatively large. It would require substantial resources (both in time spent and in financial means) and flexibility.

If a methodological task is very important (of high analytical value) and not difficult to achieve, there is no hesitation to carry it out. Neither is there much hesitation in tasks which are difficult but of high importance or which are of only moderate importance but easy to achieve. However, what about the value of tasks which are only of moderate importance and are also difficult to achieve? Does the definition of services issue really belong to this last category?

The two extreme options international organizations could adopt in respect to the definition of services issues are the following:

- (1) to present a proposal as soon as possible, for a unique definition of services, and to have it accepted through the usual procedure of international recommendations (consultations, regional meetings, expert group meetings);
- (2) to delete from the programme of work of international organizations the issue of the definition of services, considering it as not sufficiently important.

There are, of course, various intermediate solutions within the above extreme variants. One could present a proposal on the definition of services only as general guidance for countries wanting to separate services from goods without strongly recommending its use. Or, one could present a definition as guidance with the recognition that it is not to be considered as a unique definition of services. In the case of "soft" guidelines perhaps the procedure could also be somewhat eased (without having the series of meetings, etc.); however, the presentation of the proposal would still require some minimum consultation facilities and presumably some additional resources.

VI. POSTSCRIPTUM

The first five sections of this paper generated much discussion both at the 21st General Conference of the International Association for Research in Income and Wealth (IARIW), Lahnstein (Federal Republic of Germany), August 1989 and at the fourth session of the Voorburg Group on Service Statistics, Ottawa (Canada), October, 1989. Neither of these two meetings had decision-making power on the future development of the service statistics; nevertheless, especially after the Ottawa meeting a consensus seems to emerge on the issues raised in this note.

The usefulness of some service definition seems to be generally recognized. However, most experts think that there is no need to have one single service definition. Particular purposes of the various statistics, and perhaps more importantly, particular circumstances of certain field statistics (e.g., of the external trade statistics) may justify the co-existence of several service definitions. All of these definitions should be related, however, to the International Standard Industrial Classification and to the Central Product Classification. In these circumstances it would be highly desirable to specify what kind of service definition is applied to each set of statistics concerning the overall measurement of services.

It was agreed that for the 1990 meeting of the Voorburg Group that a proposal will be prepared distinguishing several possible standard service definitions. The Statistical Commission of the United Nations at its 1991 session will certainly express its views on the future directions of this work.