Services Classifications and Services Statistics

Statistics Canada

SERVICES CLASSIFICATIONS AND SERVICES STATISTICS

Present Programs

1. In Canada, as in other countries, information on services is less developed than information on goods. Many factors contribute to this. One important factor is the lack of a standard classification of service commodities.

2. Commodity statistics include statistics on the inputs and outputs of industries, on the composition of consumer, government and capital expenditures, on imports and exports and on producer, consumer and foreign trade prices. Collectively these statistics form the basis for estimates of major national accounts aggregates and of their commodity distributions. In particular, aggregate volume measures of outputs, inputs and final expenditures are estimated by summing over individual commodity estimates. Some current-price aggregates are also dependent on the availability of commodity information. In Canada, benchmark estimates of consumer expenditures are established through commodity flow studies in which the foreign and domestic supplies of individual commodities are balanced with their disposition for intermediate use, for export, for capital formation, or to consumers and governments.

3. In general terms, and certainly in the case of Canada, the information available for goods covers the major components of supply, disposition and price in substantial detail. By contrast there is little information on the products produced or used in service sectors, on the services used by goods-producing industries, and on final expenditures on services. There is only highly aggregated information on foreign trade in services. Prices data for services are confined to consumer price indexes which apply only to the services consumed by persons. For a number of service industries representing almost 10 per cent of GDP, there are no surveys to collect information needed to estimate the elements of value added. For such industries, crude estimates are derived from administrative records.

4. One consequence of the lack of information on service commodities is that the breakdown of the disposition of domestic service outputs is by total receipts or main sources of revenue of industries rather than by specific commodity outputs.

5. The lack of information on service commodities constrains the estimation of industry volume of outputs. In the absence of a definition of service commodities, programs cannot be formulated to collect data for the price indexes needed to deflate current-price estimates except in the case of a limited number of consumer services.

6. For manufacturing industries measures of real domestic product are estimated by the double deflation method. This consists in deflating commodity outputs and the corresponding values of material inputs for each industry, and by calculating net output as the difference between the two. Service inputs are not included in the calculation.1 For other goods-producing industries, estimates of real domestic product range from net output measures calculated through double-deflation to measures estimated by deflating gross outputs only.

7. To overcome the lack of information on service commodities, Canada has devoted considerable resources to the development of methods for measuring real domestic product for service industries. Some of these methods are proxies for movements in gross outputs; others measure changes in net outputs. But for industries for which both net and gross measures can be calculated, it has been observed that the movements in the two can diverge significantly. The observed trends in the outputs of service industries relative to goods industries are therefore influenced in one direction or the other by differences in methodology. These differences are the consequence of differences in the availability of commodity data.

1/ This will result in biased estimates except in cases where the growth in the volume of service inputs has been proportional to the growth in the difference between the volume of outputs and the volume of material inputs.

8. For many of the service industries, the proxies used in calculating real domestic product are likely to be biased. Where employment is used as a projector for output, no growth in productivity is assumed. While the proportion of Gross Domestic Product projected on the basis of employment has diminished steadily and now stands at about 25 per cent,2 other indicators may also be biased because they correspond to only part of the outputs of the industries to which they relate. The following are examples of the nature of estimates of output for selected industries.

WHOLESALE TRADE

Methodology and Data Sources

9. Constant price output is based on deflated sales. The sales deflators are calculated by weighting together commodity prices from a variety of sources using weights derived from partly a 1961 Census of the distributive trades. The prices are a mixture of Consumer, Industrial Product, and Export Price Indexes.

Issues and Problems

10. Implicitly it is assumed that services provided are a function of commodities sold. However, there are a number of services provided which within certain thresholds are probably unrelated to the quantities sold. Some of these services are:

Transportation
Credit
Advice
Display or Advertising
Repair and Maintenance
Guaranteed after sale maintenance

2/ Of which the major proportion consists of Health, Education and Public Administration and Defence Services.

RETAIL TRADE

Methodologies and Data Sources

11. Constant-price estimates are based on deflated sales by store type. Current-price data are based on direct surveys, monthly or annual. Annual surveys contain data on cost of goods sold. Prices for store types are calculated using commodity weights from a 1974 commodity survey to combine commodity price indexes. Most of the commodity prices are Consumer Price Indexes but a number of Industry Product Price Indexes are also used.

Issues and Problems

12. Goods sold to some extent serve as proxies for retailing services provided. But in addition to providing retail services, retailers engage in secondary non-retailing activity. For example, such activity might include:

    Advice and Consultation
    Construction Activities
    Maintenance and Repair
    Delivery
    Credit

In some cases the retail industry acts as an agent for the consumer. It will contract for construction, maintenance or repair services.

New Initiatives

13. In Canada a number of initatives are underway to improve service statistics. The following summarize these initiatives.

Marketed Business Services

14. The most dynamic element of the growth in services appears to be in the area of services to business. These include services associated with data processing, as well as various technical, advice and information services. Such services are particularly affected by technological developments and institutional changes. They are increasingly important in international trade and their effect on the domestic economy is pervasive. The shift to such services also appears to have a significant impact on patterns of employment.

15. Services to business combine many of the more difficult measurement problems with regard to price and volume estimation. Moreover, industries classified to business services are not the only providers of such services - data processing services are provided by business equipment manufacturers and by some financial institutions; engineering services are provided by construction firms.

16. Measurement will start with computer, telecommunications and insurance services, both because of their intrinsic interest and as a means of establishing methodology and costs of collection in an admittedly difficult area. Next, other services to business (engineering and scientific, management consulting and financial services) will be reviewed.

Own Account and Purchased Business Services

17. The service economy is broader than is indicated by measuring marketed services; businesses have always produced for their own consumption a variety of services, most of which also have a market counterpart.

18. There is a perception that the economy is shifting from the internal, non-marketed, provision of such services to a specialization which has the effect of converting internal service activities into services purchased in the market -- either domestic or foreign. This phenomenon is referred to as vertical disintegration. But there may also be a shift in employment within goods-producing industries from goods producing operations to ancillary services.

19. Existing data programs do not capture the elements of these activities nor do they identify their impact on the structure of business costs, on employment and on the character of employment. Methods for collecting such information are being investigated.