

A Comparison of Service Industry  
Questionnaires used in  
Different Countries

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## I. INTRODUCTION

1. The objectives of this study were:
  - . to determine the extent to which countries were using industry surveys to collect the basic data necessary for the calculation of value added (by deducting inputs from output);
  - . to identify sets of data elements for which internationally comparable information could be provided from current surveys;
  - . to identify cases where marginal changes might significantly increase the amount of internationally comparable information.
2. To tackle such a job for all service industries, for all the countries represented at the Voorburg Group Meetings, would have been an unmanageable task. Therefore a subset of the service industries were selected for examination, and questionnaires were requested from only a number of the countries represented at past meetings.
3. The industries selected for examination were:

<u>ISIC #</u>	<u>Name</u>
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Div. # 55	- Hotels and Restaurants
Div. # 70	- Real Estate Activities
Div. # 71	- Rental of Machinery and Equipment and of Personal and Household Goods
Div. # 72	- Computer and Related Activities
Div. # 74	- Other Business Activities

4. The countries asked to provide questionnaires included:
  - . Australia
  - . Canada
  - . France
  - . Great Britain
  - . Netherlands
  - . Norway
  - . Sweden
  - . United States
5. We must apologize for the relatively poor analytical treatment accorded the questionnaire from the Netherlands, where translation difficulties proved to be greater than we anticipated.
6. Actual comparability between countries for value added estimates by industry would require common definition of the boundaries of the industries. Precise comparison would also require the use of similar unites of observation and a knowledge of the degree of homogeneity of industries in different countries. The coverage of surveys used in this study frequently departs from the strict industry boundaries implied by the International Standard Industrial Classification System, and the degree of homogeneity is not known. However, the similarities among countries outweigh the differences, and useful as well as interesting comparisons can be presented.

## II. THE BASIC APPROACH

7. For this study, it was assumed that the service industry surveys being compared are intended to measure industrial

production, and to provide the data elements required for the calculation of value added, using the subtraction method. This is admittedly a simplification of reality, since most of the countries in question draw on data from a variety of sources to calculate value added.

8. As part of the preparation for a planned annual program of economic production, Statistics Canada developed "The Standard Production Account Model for Industrial Statistics." Since a standard was required to compare the questionnaires from different countries, this model was selected as the standard. Copies of the paper describing the Model will be available at the meeting in Ottawa, for those wishing a more complete description.
9. The Production Account Model is based on the premise that surveys of industrial production should collect all of the information necessary to calculate Value Added. In its most aggregate form, that calculation can be presented as follows:

CALCULATION OF VALUE ADDED

	Gross Output at Producers' Prices
-	Intermediate Inputs at Purchasers' Prices
-	Non-Commodity Indirect Taxes
=	Gross Domestic Product (Value Added) at Factor Cost
	Gross Domestic Product (Value Added) at Factor Cost
+	Indirect Taxes (Non-Commodity and Commodity)
-	Operating Subsidies
=	Gross Domestic Product (Value Added) at Market Prices

COMPONENTS OF VALUE ADDED

Labour Income  
 + Gross Operating Surplus  
 = Gross Domestic Product (Value Added) at Factor Cost

10. Statistical surveys cannot collect such aggregates, and must request data on the necessary component variables, using terms the respondent will understand. Adapted for service industries, the Production Accounts model defines the components of these aggregates as follows:

Gross Output at Producers' Prices

- (i) Revenue from Sales of Goods and Services
- (ii) Value of Capital Formation from Own-Account Production
- (iii) Inventory Change for Outputs

Intermediate Inputs at Purchasers' Prices

- (iv) Purchases of Goods
- (v) Purchases of Services
- (vi) Inventory Change for Inputs

Other Items

- (vii) Non-commodity Indirect Taxes
- (viii) Commodity-based Indirect Taxes
- (ix) Operating Subsidies
- (x) Labour Income  
       (Wages, Salaries & Supplementary Labour Income)
- (xi) Gross Operating Surplus  
       (including Capital Cost Allowance and Net  
       Operating Surplus or Loss)

### III. RESULTS

11. The eleven (11) sets of variables from paragraph 10 were used as the standard against which the survey questionnaires from various countries were compared. The comparison was done industry by industry, and the detailed results are presented in Annex 1 (attached). The results were somewhat disappointing but not surprising. Only one of the countries in the panel (France) collected all of the variables required for the calculation of value added. If it is accepted that value of own-account capital formation and inventory changes are likely to be insignificant for most service industries, then several other countries (Australia, Sweden, Norway, Canada) collect sufficient data to calculate value added with relatively little estimation or reference to other sources.
12. All countries in the panel collect information on the Revenue from Sale of Services. In most cases, the surveys collect gross or total revenue, indicating that, for most countries, the sale of goods by service industries is assumed to represent a minor source of income. However, for specific industries like the Rental of Transport Equipment, where the sale of used equipment is important, that revenue figure is requested separately by almost all countries in the panel.
13. With respect to data on purchases, the split between goods and services is far from clean. Half of the countries in the sample request data on total purchases only. For those which do request a breakdown, most request specific expense items, some of which represent purchase of goods while others refer to purchases of services. Most of these countries also have a question on "other expenses," which could be goods, services, or a combination of the two. Thus, even where

Annex 1 indicates that both types of purchases are requested, the split is not clean.

14. Very few countries have included questions on indirect taxes and subsidies. The majority seem to ignore these items at the present time. Again, this could be because the information is available from other sources.
15. Data on gross operating surplus is rarely requested in industry surveys, but can be derived in some cases. In Annex 1, this item is flagged if the other information requested is sufficiently detailed to permit the calculation of gross surplus.
16. Questions on employment numbers, wages, salaries and benefits are included on questionnaires from roughly half of the countries represented. However, the absence of such questions for some countries cannot be taken as an indication of a lack of interest, since the data are most likely available from other sources.
17. One interesting fact noticed during the examination was the number of countries (5 of the 8 in the "sample") which are asking a question on income from abroad, for some or all of the industries covered. This information is normally requested as a proportion of total revenue, rather than as an absolute figure. The high incidence of such a question is an indicator of the increasing attention paid to trade in services. Much remains to be done, but attempts are underway to fill the data gaps in this important area.

#### IV. SOURCES OF SERVICE REVENUE

18. Possibly the most interesting aspect of this study has been the opportunity to examine and compare among countries the specific questions asked on detailed sources of service revenue for the industries under study. For service industries, this kind of information is the equivalent of the commodity output/sales data collected for goods-producing industries.
19. In Annex 2, we provide some simplified tables which display the incidence of revenue breakdown questions for the industries included in this study. We hope these tables will serve as a useful reference to indicate which country or countries have made progress in "commodity" data collection efforts for services.
20. Information for the Netherlands is not included in Annex 2 because of the Translation difficulties noted earlier.
21. There are only two industries where a significant degree of comparability in revenue breakouts has developed. They are # 5520 - Restaurants, Bars and Canteens; and # 72 - Computer Services. In both of these cases, five of the eight countries covered seem to have converged in their revenue breakdowns. For the Restaurant Industry, Canada is one of the non-standard countries because we currently have only a monthly survey.
22. At the other extreme, we have the Real Estate industry. Only three countries have any form of survey activity, and only one country (Australia) has any significant revenue breakdown.



23. The other industries fall between these extremes, i.e., there are some signs of convergence on revenue breakdowns, but in no case are there more than four countries showing any significant harmonization. However, the fact that 2, 3 or 4 countries are collecting similar revenue breakdowns is surely significant. Also, for most industries, the tables clearly indicate which country or countries are leading the way in testing the commodity breakdowns.
24. The study has been particularly useful to Statistics Canada as it has afforded us the opportunity to see how other countries approach survey design, especially for those industries we are not yet surveying.

DATA ELEMENTS	Canada**	U.S.A.	Gr. Brit.	France	Aust.	Norway	Sweden	Neth.
1. Revenue from Sale of Goods and Services	X	X	X	X	X	X	X	X
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)			X	X	X			
4. Purchase of Goods			X Combined	X	X	X Combined	X Combined	X
5. Purchase of Services			X	X	X	X	X	X
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes				X Combined	X	X Combined		?
8. Commodity-Based Indirect Taxes				X		X		?
9. Operating Subsidies				X				?
10. Labour Income		X		X	X	X		X
11. Gross Operating Surplus (can be derived)				X	X	X		X

\*\* Monthly survey only (Canada).

DATA ELEMENTS	Canada*	U.S.A.*	Gr. Brit.**	France	Aust.	Norway	Sweden*	Neth.*
1. Revenue from Sale of Goods and Services				X	X	X		
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)				X				
4. Purchase of Goods				X	X			
5. Purchase of Services				X	X	X		
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes				X	X	X		
8. Commodity-Based Indirect Taxes				X		X		
9. Operating Subsidies				Combined X				
10. Labour Income				X	X	X		
11. Gross Operating Surplus (can be derived)				X	X	X		

\* Means not surveyed.

\*\* Surveyed for only capital expenditure data.

DATA ELEMENTS	Canada	U.S.A.	Gr. Brit.*	France	Aust.	Norway	Sweden	Neth.
1. Revenue from Sale of Goods and Services	X	X		X	X	X	X	?
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)	X			X	X			
4. Purchase of Goods	X			X	X	X	X	?
5. Purchase of Services	X			X	X	X	X	?
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes	X			X	X	X		
8. Commodity-Based Indirect Taxes				X		X		
9. Operating Subsidies				X		X		
10. Labour Income	X			X	X	X		?
11. Gross Operating Surplus (can be derived)	X			X	X	X		

\* Means not surveyed.

DATA ELEMENTS	Canada	U.S.A.	Gr. Brit.	France	Aust.	Norway	Sweden	Neth.
1. Revenue from Sale of Goods and Services	X	X	X	X	X	X	X	X
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)			X	X				
4. Purchase of Goods	X			X	X	X	X	X
5. Purchase of Services	X			X	X	X	X	X
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes				X	X	X		?
8. Commodity-Based Indirect Taxes				X		X		?
9. Operating Subsidies				X		X		?
10. Labour Income	X	X		X	X	X		X
11. Gross Operating Surplus (can be derived)	X			X	X	X		X

DATA ELEMENTS	Canada*	U.S.A.	Gr. Brit.	France	Aust.	Norway	Sweden**	Neth.*
1. Revenue from Sale of Goods and Services		X	X	X	X	X	X	
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)			X	X				
4. Purchase of Goods		X Combined		X	X	X Combined	X Combined	
5. Purchase of Services		X		X	X	X	X	
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes				X Combined	X	X Combined		
8. Commodity-Based Indirect Taxes				X		X		
9. Operating Subsidies				X		X		
10. Labour Income		X		X	X	X		
11. Gross Operating Surplus (can be derived)				X	X	X		

\* Means not surveyed.

\*\* Not surveyed at this time, but planning for coverage following the Engineering or Computer Services model.

DATA ELEMENTS	Canada	U.S.A.	Gr. Brit.	France	Aust.	Norway	Sweden	Neth.
1. Revenue from Sale of Goods and Services	X	X	X	X	X	X	X	X
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)			X	X				
4. Purchase of Goods				X	X	X	X	X
5. Purchase of Services				X	X	X	X	X
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes				X	X	X		?
8. Commodity-Based Indirect Taxes				X		X		?
9. Operating Subsidies				X		X		?
10. Labour Income	X	X		X	X	X		X
11. Gross Operating Surplus (can be derived)				X	X	X		X

DATA ELEMENTS	Canada	U.S.A.	Gr. Brit.	France	Aust.	Norway	Sweden	Neth.*
1. Revenue from Sale of Goods and Services	X	X	X	X	X	X	X	
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)			X	X				
4. Purchase of Goods	X			X	X	X Combined	X Combined	
5. Purchase of Services	X			X	X	X	X	
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes	X			X Combined	X	X Combined		
8. Commodity-Based Indirect Taxes				X		X		
9. Operating Subsidies	X			X		X		
10. Labour Income	X	X		X	X	X		
11. Gross Operating Surplus (can be derived)	X			X	X	X		

\* Means not surveyed.



DATA ELEMENTS	Canada	U.S.A.	Gr. Brit.	France	Aust.	Norway	Sweden	Neth.
1. Revenue from Sale of Goods and Services	X	X	X	X	X	X	X	X
2. Value of Own-Capital Formation				X				
3. Output Inventory (Change)	X		X	X				
4. Purchase of Goods	X	X Combined		X	X	X Combined	X Combined	X
5. Purchase of Services	X	X		X	X	X	X	X
6. Input Inventory (Change)				X				
7. Non-Commodity Indirect Taxes	X			X Combined	X	X		?
8. Commodity-Based Indirect Taxes				X		X		?
9. Operating Subsidies				X		X		?
10. Labour Income	X	X		X	X	X		X
11. Gross Operating Surplus (can be derived)	X			X	X	X		X

## ANNEX 2

## Sources of Service Revenue

## 5520 - RESTAURANTS, BARS AND CANTEENS

	Canada**	U.S.A.	U.K.	France	Australia	Norway	Sweden
<u>Income From:</u>							
Sale of Food		X Comb.	X Comb.	X	X Comb.	X	
Sale of Non-alcoholic Beverages		X	X	X Comb.	X	X Comb.	
Sale of Alcoholic Beverages		X	X	X	X	X	
Other Retail Sales (cigarettes, confections)		X	X	X	X	X	
Other Operating Income		X	X	X	X	X	
Total Revenue	X	X	X	X	X	X	X

\*\* Monthly survey only (Canada).

# ANNEX 2

## Sources of Service Revenue

7020 - REAL ESTATE AGENTS

	Canada*	U.S.A.*	U.K.*	France	Australia	Norway	Sweden*
<u>Income From:</u>							
Sales of Property					X(4)		
Property Management				X(6)	X(4)		
Property Valuations					X		
Franchise Fees					X		
Interest Income					X		
Other Income				X	X	X	
Income by Type of Client					X(5)		

\* Means not surveyed.

# ANNEX 2

## Sources of Service Revenue

### 7111 (Part) - RENTAL OF TRANSPORT EQUIPMENT

	Canada	U.S.A.**	U.K.***	France	Australia	Norway	Sweden***	
<u>Income From:</u>								
Car Rental	X	X		X	X		X	Comb.
Truck Rental	X	X			X		X	
Finance Leases of Motor Vehicles		X			X			
Other Leases of Motor Vehicles	X	X			X			
Franchise Income and Royalties					X			
Interest Income	X				X			
Other Income	X	X		X	X	X		
Total Revenue	X	X	X	X	X	X	X	

\*\* The U.S.A. questionnaire is a draft for 1989 (Annual).

\*\*\* Data elements collected under Division 71 questionnaire "Renting of Machinery and Equipment (without operator) and of Personal and Household Goods."

# ANNEX 2

## Sources of Service Revenue

### 72 - COMPUTER SERVICES

	Canada	U.S.A.	U.K.**	France	Australia	Norway	Sweden
<u>Income From:</u>							
Hardware/Software	X	X		X	X		X
Consultancy							
System Maintenance	X	X					X
Systems Analysis	X				X Comb.		
Systems Design	X	X Comb.			X	X	X
Programming	X	X			X		
Computer Education and Training	X	X		X	X		X
Data Processing Service	X	X Comb.			X	X Comb.	X Comb.
Data Preparation Service	X	X			X		X
Sales of Software	X	X		X	X		X
- on Commission					X		
Sales of Hardware	X	X			X		X
- on Commission					X		
Microfiche/Microfilm Preparation					X		
Royalties/License Fees	X				X		
Interest Income					X		
Other Income	X	X		X	X	X	X

\*\* Sales of Service and Product combined for Hardware, Software and Computer Operations.

# ANNEX 2

## Sources of Service Revenue

### 7411 - LEGAL SERVICES

	Canada*	U.S.A.	U.K.	France	Australia	Norway	Sweden
<u>Income From:</u>							
Conveyancing (Real Estate/ Mortgage)			X	X	X		
Advice - Law				X			
Advice - Tax Law				X			
Other Legal Services				X	X		
Interest Income					X		
Other Income		X		X	X		
Total Income		X		X	X	X	X
Income by Type of Client		X(4)			X(5)		

\* Means not surveyed.

# ANNEX 2

## Sources of Service Revenue

### 7412 - ACCOUNTING SERVICES

	Canada	U.S.A.	U.K.	France	Australia	Norway	Sweden*
<u>Income From:</u>							
Accounting Services Total	X	X	X		X	X	
General Business & Personal Accounting	X	X		X	X		
Management Accounting				X	X		
Taxation	X	X			X		
Auditing	X	X			X		
Investment Advice	X				X		
Insolvency/Reconstruction/Liquidation	X			X	X		
Other	X	X		X	X	X	
Management Consultancy Total	X	X			X		

\* Means not surveyed.

# ANNEX 2

## Sources of Service Revenue

7421 (Part) - ARCHITECTS

	Canada	U.S.A.	U.K. (1)	France	Australia	Norway (2)	Sweden (3)
<u>Income From:</u>							
Full Service/Main Phases (Design, Documentation, Supervision)	X			X	X		X
Programming	X						
Interior Design	X			X			
Landscape Architecture	X			X			X Comb. 23
Urban Planning	X			X			X
Environmental Studies	X						
Other Architectural Services	X			X	X		
Architectural Drafting					X		
Construction Project Management		X		X	X		
Interest	**				X		
Income by Type of Project	X(17)	X(20)					

(1) Combined with Engineers and Surveyors - Gross Income only.

(2) Documentation not available.

(3) Combined with Engineers and Scientific Services.

\*\* Included in "Non-operating Revenue."



# ANNEX 2

## Sources of Service Revenue

7421 (Part) - CONSULTING ENGINEERS

	Canada	U.S.A.	U.K. <sup>(1)</sup>	France <sup>(2)</sup>	Australia	Norway <sup>(3)</sup>	Sweden <sup>(4)</sup>
<u>Income From:</u>							
Consulting Engineering/ Turnkey Projects	X	X	Comb.	X	X		X
Pre-Design and Design	X	X					
Feasibility Studies	X	X					
Project Management	X						
Supplementary Services	X						
Sale of Software/Custom System Development	X						X
Construction Project Management		X		X	X		
Quantity Surveying		X			X		
Technical Testing and Analysis				X	X		X
Other Technical and Engineering Services	X	X		X	X		X
Interest	**				X		
Income by Specialization	X(14)	X(20)					

(1) Combined with Architects and Surveyors - Gross Income only.

(2) Combined with Technical Services.

(3) Documentation not available.

(4) Combined with Architects and Scientific Services.

\*\* Included in "Non-operating Revenue."

# ANNEX 2

## Sources of Service Revenue

### 7422 - SCIENTIFIC AND TECHNICAL SERVICES

	Canada	U.S.A.*	U.K. <sup>(1)</sup>	France <sup>(2)</sup>	Australia	Norway <sup>(3)</sup>	Sweden <sup>(4)</sup>
<u>Income From:</u>							
Cadastral	X				X		
Engineering	X				X		
Geodetic, Seismic and Other Surveying	X				X		
Photogrammetry	X				X		
Aerial Photography	X				X		
Mapping	X				X		
Other Surveying	X				X		
Gravimetric Surveying	X						
Hydrographic Surveying	X						
Magnetometric Surveying	X						
Laboratory Testing and Research Services	X(8)			X			X
Environmental Services	X(5)						
Other Scientific and Technical Services	X(6)			X			X
Interest	**				X		

(1) Combined with Architects and Engineers - Gross Income only.

(2) Combined with Engineers.

(3) Documentation not available.

(4) Combined with Architects and Engineers.

\* Means not surveyed.

\*\* Included in "Non-operating Revenue."

## ANNEX 2

## Sources of Service Revenue

## 7430 - ADVERTISING SERVICES

	Canada	U.S.A.	U.K.	France	Australia	Norway	Sweden
<u>Income From:</u>							
Media Billings	X	X		X**	X		
Production Billings	X	X		X	X		
Other Advertising Fees or Commissions		X		X	X		
Sales Promotion Billings	X			X	X		
Direct Market Billings	X			X	X		
Public Relations Billings	X Comb.	X			X		
Other Billings	X			X	X		
Interest Income	X				X		
Other Income	X Comb.	X		X	X	X	X
Billboard Rental	X			X			
Total Revenue	X	X	X	X	X	X	X

\*\* France collects information on both gross billings and commissions.