



Input-output Division



Technical Series

15-602

CA1
M10340
T21

no. 32

c. 2



Statistics
Canada

Statistique
Canada

Canada



Input-Output Technical Series

The Input-Output Division Technical Series are intended for users interested in input-output tables and related research for analysis and applications. Readers of the series are encouraged to contact the authors with comments and suggestions. A complete list of the titles that have been released appears at the back of this paper.

Papers in the series are distributed to Statistics Canada Regional Offices and Provincial Bureaus of Statistics. The series appears in the "Listing of Supplementary Documents" (11-207). A complete set is also maintained in the Statistics Canada Library and is available for consultation.

To obtain the list of titles and/or an individual paper, please contact:

Consulting and Marketing
Input-Output Division
Statistics Canada
23rd Floor, R.H. Coats Building
Ottawa, Ontario, K1A 0T6
(613) 951-3697

C 2

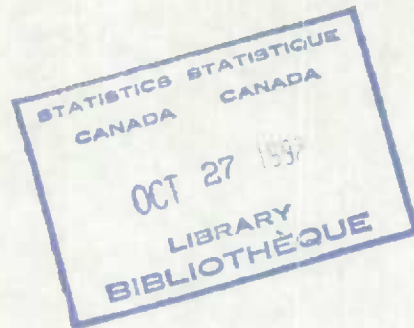
Statistics Canada
Input-Output Division

FEDERAL SALES TAX
IN THE CANADIAN INPUT-OUTPUT ACCOUNTS

BY
Yusuf Siddiqi and P.S.K. Murty

July 26, 1989

32



(Draft for internal discussion only)

ROYAL CANADIAN MOUNTED POLICE
LIBRARY
OTTAWA, CANADA

Table of Contents

	Page
I Introduction	1
II Federal Sales Tax Allocation in the Provincial Input-Output Accounts	4
Model 1	8
Model 2	11
III Forthcoming "Goods and Services Tax"	14
IV Summary	17
Appendix I Federal Sales Tax: Revenue Canada Pamphlet	19
Appendix II Licensees by National Revenue Regions, 1988	21
Appendix III Implications of Model 2 for Input-Output Accounts	22

Federal Sales Tax
in the
Canadian Input-Output Accounts
By
Yusuf Siddiqi and P.S.K. Murty*

I Introduction

In Canada, federal sales tax (FST) is levied under the Excise Tax Act since 1924¹. As mentioned in the Federal 1989 Budget document on The Goods and Services Tax (P.7, "the federal sales tax is charged on sales by manufacturers, (underlining added) for the most part to wholesalers and retailers" who in turn "will pass the tax on through the production chain until the consumer pays the tax in the form of higher prices". A Revenue Canada pamphlet on Federal Sales Tax published under the Small Business Advisors Program 1989 (See Appendix I), explains the basic conditions under which the tax is charged and emphasizes the key point of "sale" as follows:

"When is the tax payable?"

On goods manufactured or produced in Canada, the tax is payable by the manufacturer when the goods are delivered to the purchaser or when the property in the goods passes. For a licensed wholesaler, tax is payable

*Yusuf Siddiqi is the Assistant Director, Input-Output Division of Statistics Canada and P.S.K. Murty is the Chief of Public Sector in that division.

¹See Budget 89, The Goods and Services Tax, Department of Finance, Canada, Ottawa, p.3.

at the time of delivery. For importers, tax is payable when the goods are imported or taken from the warehouse."

(Underlining added.)

Thus, it is clear that FST is applicable only when goods are sold by the manufacturer or a licensed wholesaler. This conclusion is based on section 27 of the Excise Tax Act which states that there shall be imposed, levied and collected a consumption or sales tax on the sale price of all goods produced or manufactured in Canada. Manufacturers and wholesalers are licensed by Revenue Canada. In 1988, there were 75,261 licensees (manufacturers and wholesalers) under the Excise Tax Act (see Appendix II for details). The licensed manufacturers do not pay tax on production; they charge the tax on sales to non-licensed customers, such as retailers or consumers. Licensed wholesalers may buy from manufacturers or import from abroad free of sales tax if the goods are meant for resale. They charge the tax on their sales to non-licensed customers.² This basic principle of federal sales tax is also discussed in the literature of the Canadian Tax Foundation.³ Licensed manufacturers and wholesalers are fully responsible for the remittance of the federal sales tax to the federal government. This is similar to a retailer's responsibility for collecting

²See Canadian Sales and Excise Tax Guide, 13th edition, 1962-63, CCH Canadian Ltd. September 1962, pp. 11-13.,

³John F. Due, The General Manufacturers Sales Tax in Canada, Canadian Tax Paper No. 3, Canadian Tax Foundation, Toronto, October 15, 1951, p. 41 and p. 73.

provincial retail sales tax. It is worth repeating that these licensees do not pay federal sales tax when sales are between themselves, unless the goods are purchased for own - use.⁴ Also exports⁵ and inventories of licensees are non-taxable.

In essence, then, the key points pertinent to the articulation of FST in the National Input-Output Accounts are the following:

- (a) the federal sales tax is levied on the manufacturers' sale price of all goods manufactured or produced in Canada and on the duty-paid value of all imported goods;
- (b) the tax base for domestic goods is the selling price of the manufacturers;⁶
- (c) there is no tax liability for tax until and unless there is a sale to the unlicensed wholesalers or retailers by the licensed manufacturers (or wholesalers).

Since the wholesalers and retailers are intermediaries between the producer and the consumer of commodities, the federal sales tax is

⁴Canadian Sales and Excise Tax Guide, 1962. op. cit. p.11.

⁵See John F. Due, The General Manufacturers Sales Tax in Canada, op. cit., p. 71 for exports.

⁶ The National Finances, 1986 - 87, Canadian Tax Foundation, Toronto, p.7:46.

treated as a commodity tax at the point of consumption in the National Input-Output Accounts. Implicit in this allocation is the assumption that tax-paid goods are sold to the consumers in the same year of their purchases from manufacturers. It is recognized, however, that there could be some inventories of tax-paid goods with the unlicensed wholesalers and retailers, but the tax is not allocated, at present, to inventories due to lack of adequate data.

The federal sales tax is one of the commodity taxes for the Input-Output Accounts and the procedures used to allocate all commodity taxes to commodities and users (industries and final demand categories) are described in a separate paper called Commodity Indirect Taxes in the Canadian Input-Output Accounts, 1984. The purpose of this paper is to discuss the methodology relevant to the FST for the Provincial Input-Output Accounts.

II. Federal Sales Tax Allocation in the Provincial Input-Output Accounts

The Provincial Input-Output Accounts are a disaggregation of National Input-Output Accounts and therefore follow the same classification of commodities, industries and final demand categories. In this sense, the provincial totals for commodity inputs and outputs of all industries add up to the national totals. Also, the commodity totals of provincial final demand categories add up to the national totals. However, the provincial dimension

raises the issue of how to allocate federal commodity taxes by province/territory.

The provincial and local commodity taxes do not pose a problem because the tax liability in any province, by definition, is equal to tax collections in that province for both provincial and local governments. Unless otherwise specified, federal commodity taxes are applicable to all provinces regardless of provincial boundaries. Thus, it is immaterial who collects and remits the tax to the federal government. Furthermore, in the provincial context, the head offices of large corporations might remit taxes (collected in any province in which their sales occurred) to the federal government in Ontario. One should not construe such transactions as taxes originating in the provinces where those head offices are located as the sales which generated the taxes might have taken place in other provinces. The point to be remembered in the allocation of federal commodity taxes is "when the tax is payable" rather than "who collects or charges the tax and pays to the federal government in Ontario".

As mentioned, the National Input-Output Accounts show data for Canada only, while the Provincial I/O Accounts show the same data disaggregated into 10 provinces and 2 territories which together equal the National totals. Taking this into consideration what, then, is the rationale for the allocation of federal sales tax to provinces/territories?

Since federal sales tax is levied on the selling price of licensed manufacturers and wholesalers to retailers and consumers at the point of consumption, it has to be allocated in the province/territory of consumption. Of course, the tax does not apply to the place of production or distribution, because licensed manufacturers and wholesalers do not have to pay tax until they sell the products to unlicensed establishments, retailers or consumers. Also, inter-provincial trade between licensees does not attract the tax, and hence, production or distribution among licensees does not attract the federal sales tax as those transactions are tax-free. It follows, then, that both the income-based GDP and the expenditure-based GDP of a province would include the federal sales tax attributable to goods and services sold in that province either as a final use or taxable intermediate use. These and other transactions are further illustrated in simple models presented later.

For the Input-Output Accounts, the federal government is considered as another level of government resident in each province and territory collecting the taxes by the application of the same legislation across the country. Therefore, the tax is reflected in the province where it originated on taxable transactions; in other words, where the consumption occurred for federal sales tax.

This procedure is consistent with the legislation.⁷

As explained in the paper referred to earlier, all other federal commodity taxes, such as excise taxes, excise duties, gasoline taxes, etc., were first allocated to the relevant taxable commodities. Then the taxable transactions of industries and final demand categories were determined based on legislation. If these taxes are levied at the point of consumption, their provincial allocation is based on the consumption in the province or territory concerned. This procedure, which is also consistent with legislation, is elaborated in that paper.

To recapitulate:

- (a) The federal government is just another level of government located in each province and territory, and in this sense, it is considered to be a resident of all provinces and territories. It collects taxes under federal legislation, which applies equally in all provinces/territories. If Ontario produces a commodity and exports it to Québec, and if Québec then exports to the United States, there would be no federal sales tax liability because exports are non-taxable for federal sales tax.

- (b) However, if Québec uses that commodity, consumers in Québec

⁷ See John F. Due, The General Manufacturers Sales Tax in Canada, *op. cit.*, p. 75.

will have to pay the tax. The allocation of taxes in each province is based on the same principle used in the national Input-Output Accounts which is consistent with the legislation.

The above points are illustrated in the following simple models in the context of GDP concept of both approaches -- Expenditure-based and income-based.

Model 1

1. Federal sales tax (FST): 12%.
2. This tax is applicable across the country, as there is no place-related exemption.
3. An Ontario manufacturer produced automobiles worth \$100 million, with wages and salaries of \$ 80 million and other inputs of \$20 million. He is licensed and therefore did not pay FST when the automobiles were produced. He sold the automobiles for \$150 million to a licensed wholesaler in Ontario. In that period (Period I) the GDP of Ontario will be as shown below. The licensed wholesaler does not pay federal sales tax according to law. Therefore, this is a non-taxable transaction between the manufacturer and the wholesaler.

Income-Based
GDP of Ontario
(at the production stage)

Expenditure-Based
GDP of Ontario

\$ Millions			
Wages & Salaries	80		
Factor incomes in other inputs (assumed domestic production)	20	Inventories of wholesalers (value paid to manufacturer)	150
Operating surplus	<u>50</u> <u>150</u>		<u>150</u>

4. The automobiles were then shipped to Québec in Period II by the licensed wholesaler, assuming zero cost and profit for the wholesaler. He did not sell to retailers or consumers.

GDP in the wholesale industry of Ontario

Income-based GDP of Ontario

Expenditure-based
GDP of Ontario

\$ Millions			
Operating surplus	0	Inventories	- 150
	<u>0</u>	Exports to other provinces	150
			<u>0</u>

Exports are not taxable for federal (FST) and provincial sales taxes (PST) under the present law. Therefore, there are no indirect taxes.

5. The automobiles were sold to retailers in Québec for \$150 million + 12% FST + 8% provincial sales tax and retailers sold to consumers for \$181.44 million (assuming zero cost to retailers). In this case, 12% FST = \$18 million; 8% PST on

\$168 millions = \$13.44 millions; total indirect tax = \$31.44 millions.

<u>Income-based GDP of Québec</u>		<u>Expenditure-based GDP of Québec</u>	
\$ Millions			
Operating surplus	0	Personal Expenditure	181.44
Indirect taxes FST	18.00	Imports from Ontario	-150.00
	PST <u>13.44</u>		
	<u>31.44</u>		<u>31.44</u>

6. Therefore, the GDP at market prices of Québec comprises only indirect taxes. The factor cost GDP was "0". This is how the provincial Input-Output Accounts would show the data. This position is consistent with what is happening in the economy as far as federal and provincial sales taxes are concerned.

If, however, federal sales tax is applied at the place of production, the levels of GDP between provinces would be different. However, the national GDP will not be affected.

The next model shows the levels of GDP in Ontario and Quebec if we were to allocate federal sales tax at the point of production.

Model 2

1. Federal sales tax (FST): 12%.
2. This tax is applicable across the country, as there is no place-related exemption.
3. An Ontario manufacturer produced automobiles worth \$100 million, with wages and salaries of \$80 million and other inputs of \$20 million. It was assumed in this model that, since the FST is commonly called the "manufacturers sales tax", the manufacturer was liable for the FST in the province of production. The sale price was still \$150 million as in Model 1. (The manufacturer did not sell automobiles during Period I).

<u>Income-based GDP of Ontario</u>		<u>Expenditure-based GDP of Ontario</u>	
		\$ Million	
Wages & Salaries	80	Inventories	168
		(150 + 18 FST)	
Factor incomes in other inputs (assumed domestic production)	20		
Operating surplus	50		
Indirect taxes (150 x 12%)	18		
Total	<u>168</u>		<u>168</u>

In fact, the federal government would not receive the indirect

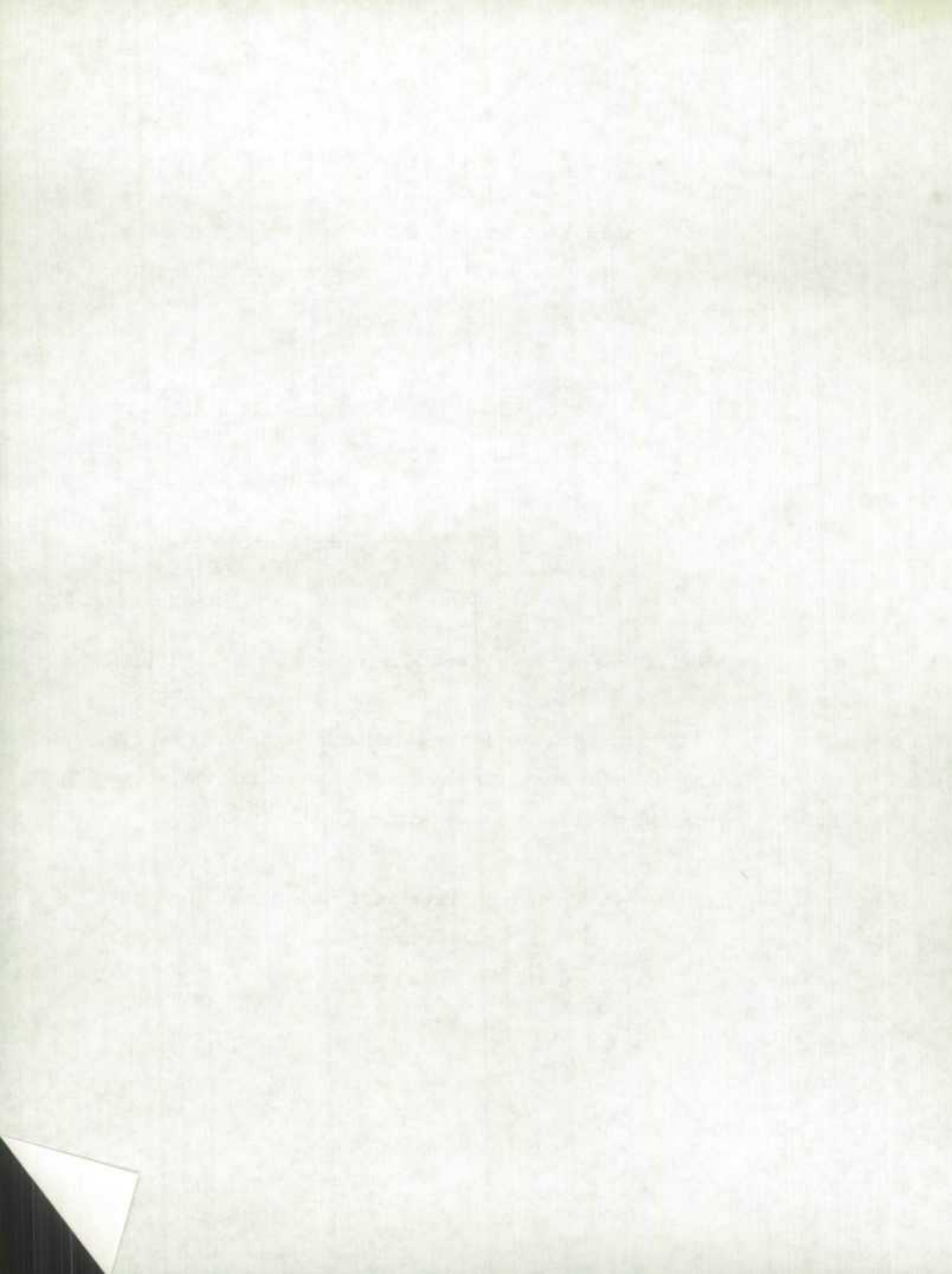
tax revenue of \$18 million because it was not yet paid.

4. The automobiles were then shipped in Period II to Québec by the wholesaler. He did not sell them to retailers or consumers.

<u>Income-based GDP of Ontario</u>		<u>Expenditure-based GDP of Ontario</u>
\$ Millions		
Operating		Inventories - 168
surplus	0	Exports to + 168 other provinces
Total	<u>0</u>	<u>0</u>

The inventories and exports were overvalued by \$18 million each. Nevertheless, the GDP is still "0" for that period. If Balance of Payments data for inter-provincial transactions are generated based on international concepts, the exports shown above in the GDP would not be consistent with those data.

5. The automobiles were sold to retailers in Québec for \$168 million + 8% provincial sales tax. The sale price was therefore $168 + 13.44 = \$181.44$ million.



<u>Income-Based GDP of Québec</u>		<u>Expenditure-based GDP of Québec</u>	
Operating surplus	0	Personal expenditure	181.44
Indirect taxes (PST on \$168 @ 8%)	<u>13.44</u>	Imports from Ontario	<u>-168.00</u>
Total	<u>13.44</u>		<u>13.44</u>

6. Here again, the GDP at market prices of Québec consists of indirect taxes only. But instead of showing indirect taxes at both the federal and provincial levels, only the provincial portion is reflected because the FST was wrongly attributed to the province of production, namely, Ontario.

In fact, the GDP at market prices in Québec should include both federal and provincial indirect taxes to reflect the reality. But the erroneous assumption built into the model yielded a false GDP for both Ontario and Québec.

The legislation and its interpretation does not support Model 2; they support Model 1 which is reflected in the Provincial Input-Output Accounts. We would like to emphasize that the GDP of a particular province should not be influenced by the administrative procedures of making manufacturers responsible to remit the tax to the federal government. The question which should be answered is "when is the tax payable" rather than "who charges or collects the

tax and transfers" to the federal government as clearly illustrated by Revenue Canada (see Appendix I).

Suppose that the responsibility for collecting FST is shifted to the retailer from the manufacturer for administrative convenience. Then Model 2 reduces the GDP in Ontario and increases the GDP in Québec. In fact, other things being equal, there should be no change in the GDP even after such a shift in tax administration is implemented. Model 1 would do just that and it is the logical approach for the Provincial Input-Output Accounts.

Besides the above effect of Model 2 on the Provincial GDP, there are other implications on the National Input-Output Accounts as outlined in Appendix III.

III Forthcoming "Goods and Services Tax"

In the 1989 Budget, federal sales tax reform was proposed. Effective January 1, 1991, the existing federal sales tax (FST) will be replaced by "Goods and Services Tax" (GST)⁸.

The GST is also a consumption tax,⁹ but in contrast to FST which is levied at one stage, it will be levied at several stages

⁸Budget 1989, The Goods and Services Tax, op. cit., P11.

⁹Ibid. p.13.

on sales of goods and services based on value-added in the production and distribution activities.

In essence, it is a value-added tax and the following are some of the important points.

- (i) Exports are exempted from GST. If the exporter paid GST on the inputs used in producing the exported goods, he could claim a credit from the federal government for the input taxes and deduct it from the tax he owed to the government on other transactions.

- (ii) All businesses throughout the production and distribution chain, including retailers, charge GST on their domestic sales. Here again, the businesses are allowed input tax credit for any tax paid on purchases of goods and services used in their business. The Budget document stated that "at the end of each reporting period, when the firm files its sales tax return, it will simply remit the difference between the tax owed on sales and the value of its input tax credits"¹⁰ If the input tax credit is larger than the GST on the sales, the government will refund the difference.

¹⁰Ibid. p.11.

(iii) The operation of the GST which is applicable at several stages of sales, has to rely heavily on a system of invoices "which will allow firms to identify easily the tax they have paid on their purchases and the tax they have charged on their sales".

(iv) There will be more taxable items under GST than under FST and "the price of previously untaxed items will increase"¹¹

The proposed tax-exempt goods and services for the GST are:

- (i) Basic groceries
- (ii) Prescription drugs
- (iii) Medical devices
- (iv) Residential rents
- (v) Most health and dental services, including hospital and nursing home services
- (vi) Daycare services
- (vii) Legal aid services
- (viii) Most educational services

It is also stated that technical details on the tax base are expected to be available in a background paper.

¹¹Ibid. p.19 and p.23.

Although the articulation of GST in the Input-Output Accounts can be determined only after the full technical details are studied, it appears at the outset that the producer - purchaser prices include the GST at several points. As such, the tax margin at all those points should reflect the GST.

The important point that should be remembered is that, for any particular province, the GDP at market prices prior to GST and after the GST should not change, if other things are equal, in both periods. Since the GST and FST are consumption taxes, the treatment in the provincial Input-Output Accounts should be reflected as such in the provinces where the sale / use / consumption took place.

IV Summary

1. This paper pulled together available background information to demonstrate that the existing federal sales tax (FST) is a tax at the point of consumption, but not production.

Although the FST is generally called "manufacturers' sales tax", manufacturers are made responsible under the Act to apply (or charge) the federal sales tax and remit it to the federal government only if their production is sold to unlicensed wholesalers, retailers, or consumers. As Revenue Canada outlined in its pamphlet (Appendix I), the relevant question to determine whether it is a production tax or consumption tax is "when is the

tax payable?" rather than, "who charges and transfers the tax to the federal government?".

2. The provincial Input-Output Accounts should also use the same procedures as those of National Input-Output Accounts in the articulation of FST. Then, the GST which will replace FST in 1991 will not affect the level of GDP at market prices if other things are equal.

3. It must be emphasized here that I/O Accounts reflect the ex-post situation. The tax base is the actual selling price received by the manufacturer. If the manufacturer lowers his selling price, his profits will be lower and the FST will be based on that lowered selling price.

If it is argued that manufacturer paid the FST on his production, it is tantamount to saying that he paid the tax even before it became due (ie. he advanced the funds to the federal government). It is a fictive transaction. If such a fictive transaction has to be reflected in the Provincial Accounts, the profits allocated to the province/territory concerned should be adjusted downward. This will be another fictive transaction. Then, the question we should ask ourselves is: should we reflect fictive transactions in the Provincial Accounts? or should we reflect the transactions as they happen?



Federal Sales Tax

Federal Sales Tax

WHAT IS FEDERAL SALES TAX?

Federal Sales Tax is a general sales tax imposed on goods manufactured or produced in Canada or imported into Canada.

tax on the value of goods sold or manufactured for their own use. On imported goods, tax is collected by Customs at the point of entry into Canada.

WHO PAYS THE TAX?

Licensed manufacturers, licensed wholesalers and importers pay Federal Sales Tax. The tax is imposed once on any goods and a system of exemptions and refunds ensures its single application.

HOW DOES THE TAX WORK?

WHEN IS THE TAX PAYABLE?

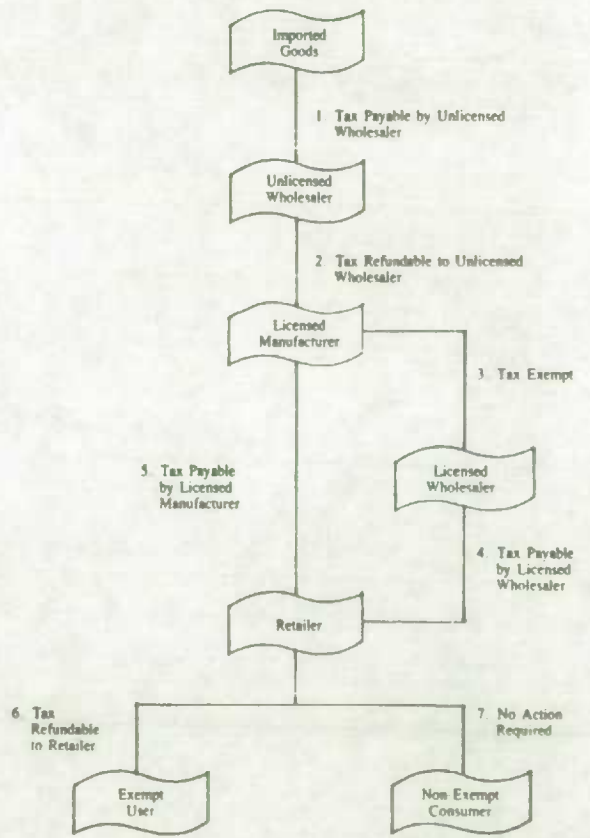
On goods manufactured or produced in Canada, the tax is payable by the manufacturer when the goods are delivered to the purchaser or when the property in the goods passes. For a licensed wholesaler, tax is payable at the time of delivery. For importers, tax is payable when the goods are imported or taken from the warehouse.

ARE ALL GOODS TAXABLE?

The tax is imposed on sales of all goods except those for which there is specific provision for exemption. These exemptions can be categorized into production goods, necessities of life, administrative convenience, purchases by public institutions and exports.

HOW IS THE TAX ADMINISTERED?

Manufacturers or producers of goods in Canada, if they meet certain conditions, are required to apply to their local Excise office for a licence and are required to remit



Federal Sales Tax

Canada

APPENDIX 1

- (1) The goods are imported into Canada by an unlicensed wholesaler. The wholesaler pays Federal Sales Tax on the duty-paid value at time of import.
- (2) The wholesaler sells the goods to a licensed manufacturer entitled to purchase the goods tax free. The wholesaler sells the goods tax free and applies to the local Excise office for a refund of the tax paid.
- (3) The licensed manufacturer sells finished goods to a licensed wholesaler entitled to purchase the goods tax exempt. Because the components of the finished goods were purchased tax exempt by the manufacturer, the goods continue to move in a tax-free status.
- (4) The licensed wholesaler sells to a non-exempt party, in this case a retailer, and accounts for tax on purchase price. This provides tax equality between the licensed manufacturer and the licensed wholesaler.
- (5) The licensed manufacturer sells to a non-exempt party, in this case a retailer, and accounts for tax on sale price. The manufacturer remits the tax to the local Excise office.
- (6) The retailer, who must purchase tax paid, sells to an exempt person and applies to the local Excise office for a refund.
- (7) The retailer sells to a non-exempt consumer. Federal Sales Tax has been paid and no action is required.

WHERE CAN YOU GET MORE INFORMATION?

Please note that this pamphlet contains general information and is not intended as a formal interpretation of the *Excise Tax Act* and Regulations. Information on matters relating to your operations is available from your local Excise office.

APPENDIX II: LICENSEES BY NATIONAL REVENUE REGIONS, 1988

NATIONAL REVENUE REGION	PROVINCE	TOTAL NUMBER OF LICENSEES	DISTRIBUTION %
1. HALIFAX	NEWFOUNDLAND PRINCE EDWARD ISLAND NEW BRUNSWICK NOVA SCOTIA	3,283	4.4
2. QUEBEC		5,503	
3. MONTREAL		13,124	
4. SUB-TOTAL	QUEBEC	18,627	24.7
5. OTTAWA		3,621	
6. TORONTO		20,785	
7. LONDON		10,707	
8. SUB-TOTAL	ONTARIO	35,113	46.6
9. WINNIPEG	MANITOBA SASKATCHEWAN	3,956	5.3
10. CALGARY	ALBERTA	5,555	7.4
11. VANCOUVER	BRITISH COLUMBIA	8,727	11.6
12. TOTAL		75,261	100.0

SOURCE: REVENUE CANADA, CUSTOMS & EXCISE

Appendix III: Implications of Model 2 for Input-Output Accounts

If the FST is allocated to the producing industry as in Model 2, serious implications would be created for the Input-Output Accounts as explained below:

It should be remembered that:

- (a) FST, being a commodity indirect tax, is presently articulated as such (i.e. tax margin) in the Input-Output Accounts.
- (b) Model 2 states that automobile industry paid the FST.

Implication 1: Based on Model 2, the FST has to be allocated to the producing industry in the form of an artificial input, either as a direct sales tax or as a fixed cost like property tax. This treatment implies that the present concept of producers' valuation has to be altered for the output of industries. Since the sales value would include FST hidden, it would not be possible to identify FST separately in the Input-Output Accounts.

Implication 2: This concept of producers' prices would be

inconsistent with the international concept.

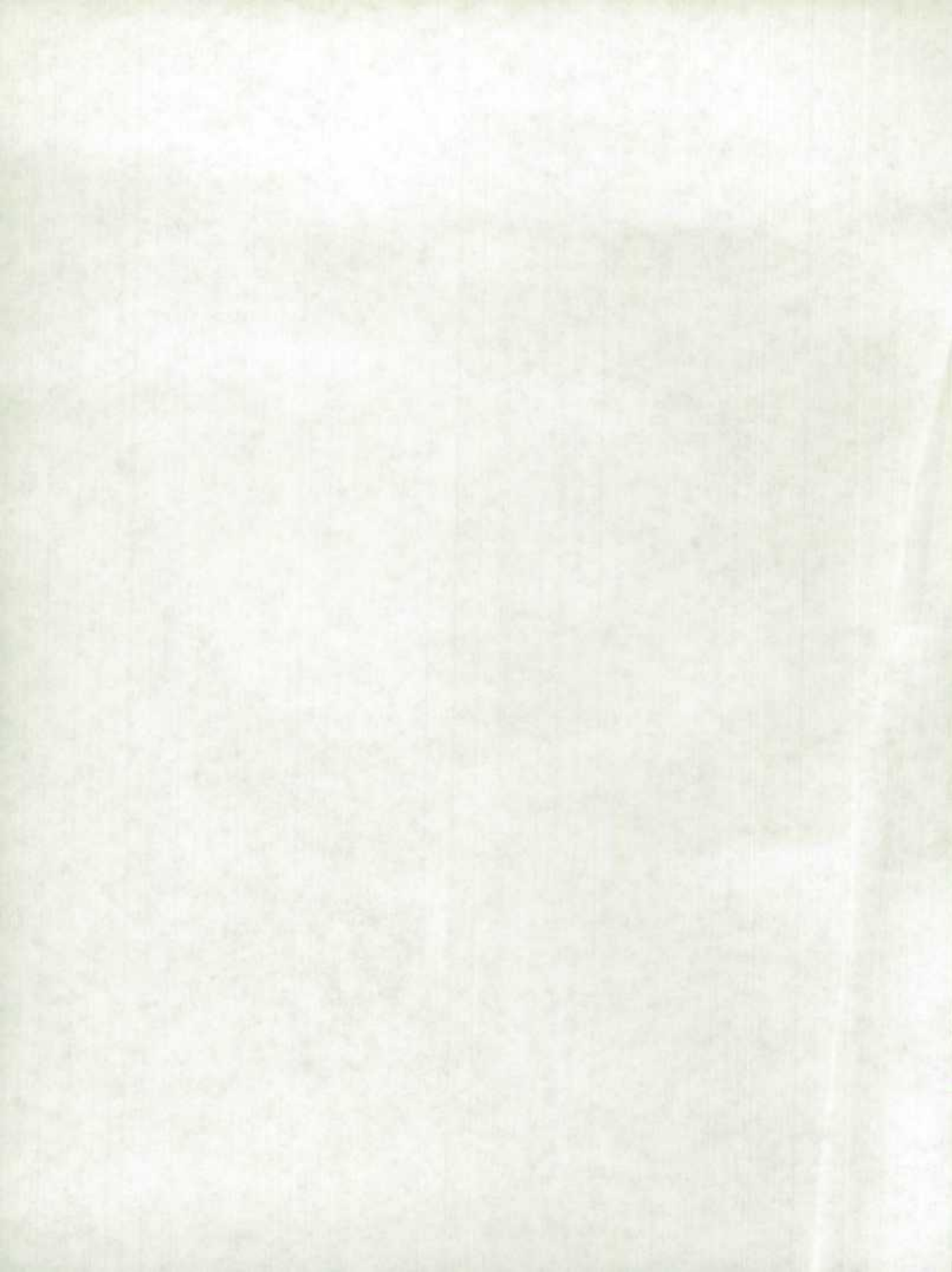
Implication 3: For deflation purposes, the manufacturers' selling prices, which presently exclude FST, have to be adjusted and it is a complex task involving substantial changes to the present methods.

Obviously, Model 2 does not work and its weakness is more visible if one tries to articulate the FST as tax margin to input commodities of producing industry. One could perhaps take up another position: that Model 2 worked for GDP Accounts and that it should work for Input-Output Accounts also. Surely, if we do not go beyond the compilation of GDP, that Model could be believed as true. If we start allocating to commodities, it simply does not work.

Still, one could take up a different position: that FST should be treated as a non-commodity tax, so that the problem of allocating to commodities as tax-margin could be avoided altogether. Well, then, are we justified in classifying indirect taxes the way we want -- from commodity type to non-commodity type or vice-versa?

In conclusion, Model 2 creates more problems for the I/O Accounts and international comparability will not be possible. Furthermore, it artificially inflates the GDP of the province of production without regard to the fact that the province in question

did not generate the FST.



TECHNICAL SERIES
INPUT-OUTPUT DIVISION
STATISTICS CANADA

(1)
Hoffman et al., *"User's Guide to Statistics Canada Structural Economic Models"*, Input-Output Division, Statistics Canada, Revised september 1980.

(2)
Hoffman et al., *"Guide d'utilisation des modèles économiques et structureaux de Statistique Canada"*, Division des entrées-sorties, Statistique Canada, Révision septembre 1980.

(3)
Durand R. and Rioux R., *"On the Accounting Decomposition of Input-Output Price Indices Into Their Cost Components: The Case of Indirect Taxes"*, Paper Presented at the International Round Table on Taxes and the CPI, Ottawa, Input-Output Division, Statistics Canada, March 1987, revised May 1989.

(4)
Siddiqi Y., Murty P.S.K., Diena J., *"Highlights of the Public Sector Market Study, 1983"* Input-Output Division, Statistics Canada, September 1987.

(5)
Murty P.S.K., *"Size and Structure of the Public Sector Market, 1983, Sources and Methods"* Input-Output Division, Statistics Canada, September 1987.

(6)
Durand R., *"The Adding-Up Problem in the Computation of Aggregate Price GDP"*, Input-Output Division, Statistics Canada, October, 1987.

(7)
Durand R. and Markle T., *"Measuring the Variability of Input-Output Structures: A Progress Report"*, Input-Output Division, Statistics Canada, December 1987.

(8)
Durand R. and Markle T., *"On the Variability of Input-Output Structures: A Progress Report on the Constant Price Industrial Input Structures"*, Input-Output Division, Statistics Canada, April 1988.

(9)
Durand R. and Markle T., *"Structural Change in the Canadian Economy: The Supply Side in Current Prices"*, Input-Output Division, Statistic Canada, July 1988.

(10)
Durand R., *"Statistics Canada's Price Model: A Detailed Description of the Structure and Simulation Capacities"*, Input-Output Division, Statistics Canada, August 1988.

(11)

Durand R. and Markle T., *"Structural Change in the Canadian Economy: The Supply Side in Constant Prices"*, Input-Output Division, Statistics Canada, October 1988.

(12)

Durand R. and Markle T., *"A Diversity Analysis of Structural Change Based on the Canadian Input-Output Tables"* Input-Output Division, Statistics Canada, January 1989.

(13)

Durand R. and Diaz A., *"Input-Output Modelling of Commodity Indirect Taxes for Macroeconomic Analysis"*, Input-Output Division, Statistics Canada, January 1989.

(14)

Murty P.S.K., Génèreux P.A., Leblanc D., Greenberg M. *"Provincial Sales Tax Commodity Allocation Project, 1984 Sources and Methods"* Input-Output Division, Statistics Canada, January 1989.

(15)

Durand R., *"The Balancing Process of the Regional Input-Output Tables"*, Input-Output Division, Statistics Canada, February 1989.

(16)

Siddiqi Y., Murty P.S.K., Diena J., *"Highlights of the Provincial Sales Tax Commodity Allocation Project, 1984,"* Input-Output Division, Statistics Canada, January 1989. Reprinted from Canadian Economic Observer, May 1989.

(17)

Durand R., *"Aggregation Formulas for Multifactor Productivity"*, Input-Output Division, Statistics Canada, June 1989.

(18)

Durand R. and Diaz A., *"A New Specification of the Leakage Parameters of the Input-Output Model"*, Input-Output Division, Statistics Canada, July 1989.

(19)

Siddiqi Y., Murty P.S.K., *"Commodity Indirect Taxes in the Canadian Input-Output Accounts, 1984"* Input-Output Division, Statistics Canada, July 6, 1989.

(20)

Markle T., *"Progress Report # 5: On the Temporal Variability of the Aggregate Input Structure"*, Input-Output Division, Statistics Canada, September 1989.

(21)

Siddiqi Y., Murty P.S.K., *"Highlights of Commodity Taxes for 1984"*, Input-Output Division, Statistics Canada, Canadian Economic Observer, September 1989.

(22)

Siddiqi Y., Murty P.S.K., *"Commodity Indirect Taxes - An Inventory before the GST"*, Input-Output Division, Statistics Canada, Canadian Economic Observer, October 1989.

(23)

Murty P.S.K., Siddiqi Y., *"Government Expenditures on Goods and Services and Transfer Payments in Canada, 1961-1985"* Input-Output Division, Statistics Canada, December 1989.

(24)

Murty P.S.K., Siddiqi Y., "Government Expenditures on Goods and Services and Transfer Payments in Canada 1961-1985 - Reprint from Canadian Economic Observer May 1990" Input-Output Division, Statistics Canada.

(25)

Siddiqi Y., Murty P.S.K., "Commodity Indirect Taxes in the Canadian Input-Output Accounts, 1984-1986" Input-Output Division, Statistics Canada, February 1990.

(26)

Durand R., "Growth Accounting and the Quality Adjustment of the Capital Stock", Input-Output Division, Statistics Canada, February 1990.

(27)

Durand R., Salem M., "On a Dynamic Productivity Index Number Formula", Input-Output Division, Statistics Canada, revised version February 1990.

(28)

Diaz A., "The 1989 increase in Labour Compensation per Person: Was it caused by wage demands?", Input-Output Division, Statistics Canada, June 1990.

(29)

Murty P.S.K., "Federal Goods and Services Tax and the Canadian System of National Accounts" Input-Output Division, Statistics Canada, October 1990.

(30)

"Effective tax rates and net price indexes", Feature Article, Canadian Economic Observer, November, 1990.

(31)

Salem M., "Documentation of Capital Input and Capital Cost time series for Multifactor Productivity Measures", Input-Output Division, Statistics Canada, reviewed and updated by R. Fortin and Y. Sabourin, December 1990.

(32)

Siddiqi Y., Murty P.S.K., "Federal Sales Tax in the Canadian Input-Output Accounts" (Draft: For internal discussion only), Input-Output Division, Statistics Canada.

(33)

Murty P.S.K., "New Paradigm to Analyze Government Transfer Payments with special reference to Canada", Input-Output Division, Statistics Canada, Draft, January 3 1991.

(34)

Durand R., "Productivity Analysis and the Measurement of Gross Output Net of Inter-Industry Sales", Input-Output Division, Statistics Canada, January 1991.

(35)

Murty P.S.K. and Siddiqi Y., "A New Paradigm to Analyze Commodity Indirect Taxes and Subsidies, 1986-1989", Input-Output Division, Statistics Canada, April 5, 1991.

(36)

Généreux P., "The Input-Output Structure of the Economies of the Yukon and Northwest Territories, 1984", Input-Output Division, Statistics Canada, May 1991.

(37)

Généreux P., *"La structure par entrées-sorties des économies du Yukon et des territoires du Nord-Ouest, 1984"*, Division des entrées-sorties, Statistique Canada, Mai 1991.

(38)

Durand R., *"An Alternative to Double Deflation for Measuring Real Industry Value-Added"*, Input-Output Division, Statistics Canada, June 1991.

(39)

Généreux P., *"I/O Tables in constant prices: Revised deflation process and analysis of the machinery and equipment sector"*, Input-Output Division, Statistics Canada, September 1984. Reprint July, 1991.

(40)

Murty P.S.K. and Siddiqi Y., *"Government subsidies to industries"*, Input-Output Division, Statistics Canada, Reprint from Canadian Economic Observer, May 1991.

(41)

Diaz A., *"Alternative Concepts of Output and Productivity"*, Input-Output Division, Statistics Canada, Catalogue 15-204, 1989 issue; July 1991.

(42)

Durand, R., *"Aggregation, Integration and Productivity Analysis: An Overall Framework"*, Input-Output Division, Statistics Canada, Catalogue 15-204, 1989 issue; July 1990.

(43)

Durand R. and Salem M. and Hayes D., *"A New Look at Productivity of Canadian Industries"*, Input-Output Division, Statistics Canada, catalogue 15-204, 1988 issue; March 1990 also Canadian Economic Observer, July 1990. (Reprinted October 1991).

(44)

Diaz A., *"The Statistics Canada Concepts and Measures of Productivity"*, Input-Output Division, Statistics Canada, December 6, 1990. (Reprinted October 1991)



BON DE COMMANDE

Division des entrées-sorties

POSTEZ À : **TÉLÉCOPIEZ À : (613) 951-1584**

**Vente des publications
Statistique Canada
Ottawa (Ontario) K1A 0T6**

Le bon télécopié tient lieu de commande originale. Veuillez ne pas envoyer de confirmation.

(En caractères d'imprimerie s.v.p.)

Entreprise _____
 Service _____
 À l'attention de _____
 Adresse _____
 Ville _____ Province _____
 Code postal _____ Tél. _____

MODALITÉS DE PAIEMENT

Numéro d'ordre d'achat (*inclure s.v.p.*) _____

Paiement inclus _____ \$

Envoyez-moi la facture plus tard (max. 500 \$)

Portez à mon compte : MasterCard VISA

N° de compte _____

Date d'expiration _____

Signature _____

Numéro de référence du client _____

Numéro au catalogue	Titre	Fréquence de parution/ Date de parution	Abonnement annuel ou prix de la publication			Qté	Total \$
			Canada \$	États-Unis \$ US	Autres pays \$ US		
15-201	Système de comptabilité nationale: La structure par entrées-sorties de l'économie canadienne, 1987	Annuel 02/91	60.00	72.00	84.00		
15-204F	Système de comptabilité nationale: Mesures globales de productivité, 1989	Annuel 07/91	40.00	48.00	56.00		
15-510	La structure par entrées-sorties de l'économie canadienne, 1961-1981	Hors Série 01/88	66.00	79.00	79.00		
15-511	La structure par entrées-sorties de l'économie canadienne en prix constants, 1961-1981	Hors Série 01/88	66.00	79.00	79.00		

This order coupon is available in English upon request

018

STATISTICS CANADA LIBRARY
BIBLIOTHÈQUE STATISTIQUE CANADA



1010129164

