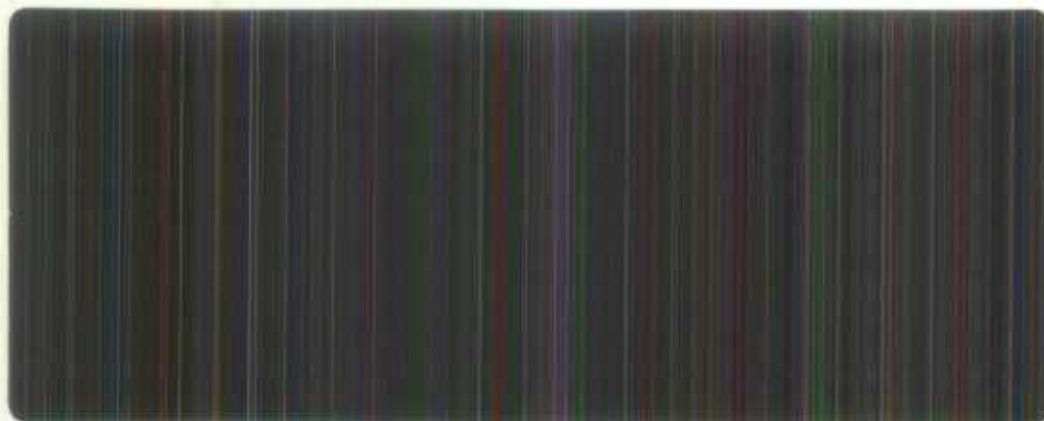
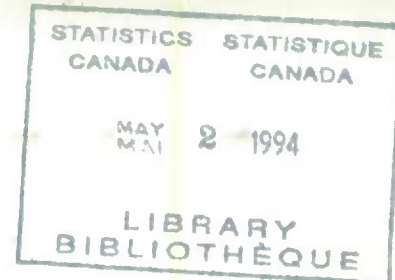


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**The Need for  
A System of Grants Accounts**

**By  
P.S.K. Murty**

**# 56**

**March, 1993**

Prepared for presentation at the 19th Annual Meetings of the Eastern Economic Association,  
March 19-21, 1993, at the Shoreham Hotel, Washington, D.C., USA.

**EEC931993**





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# THE NEED FOR A SYSTEM OF GRANT ACCOUNTS

by

P.S.K. Murty\*

## I Introduction

In the field of Macro-economics, we have a fully developed System of National Accounts which provides, among other things, the conceptual framework, classification procedures, and methods of arranging statistical aggregates in various tables for economic analysis. As that System of National Accounts deals mainly with exchange economy, we do not have a similar system for grants economy.

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\*P.S.K. Murty is the Chief of Public Sector, Input-Output Division, Statistics Canada. The views in this paper are those of the author, not necessarily those of Statistics Canada. This paper draws on the materials in the papers: (1) "Government Expenditures on Goods and Services and Transfer Payments in Canada, 1961-1985" by P.S.K. Murty and Yusuf Siddiqi presented at the joint session of the American Economic Association and the Association for the Study of Grants Economy held in Atlanta on December 30, 1989; (2) "New Paradigm to Analyze Government Transfer Payments with Special Reference to Canada" by P.S.K. Murty presented at the Second Annual Convention of International Congress of Political Economists held in Boston, January 9-12, 1991; (3) "A New Paradigm to Analyze Commodity Indirect Taxes and Subsidies, 1986-1989" by P.S.K. Murty and Yusuf Siddiqi, an extract of which was published in the Canadian Economic Observer, Statistics Canada, Catalogue 11-010, Ottawa, May 1991; (4) "Scope of Public Grants Economy in Canada" by P.S.K. Murty and Yusuf Siddiqi presented at the joint session of the American Economic Association and the Association for the Study of the Grants Economy held in New Orleans, January 3-5, 1992; and (5) "Transfer Payments in National Accounts and Grants Economics" by P.S.K. Murty and Yusuf Siddiqi presented at the 22nd General Conference of the International Association for Research in Income and Wealth held in Flims, Switzerland, August 30 - September 5, 1992.





The purpose of this paper is to demonstrate that there is an urgent need for an exclusive System of Grant Accounts to define, classify and organize grants into appropriate tables for analysis. Such a System of Grant Accounts should facilitate the availability of grants data in a central source within a consistent and systematic framework. Let me elaborate.

The System of National Accounts is built around the concept of Gross Domestic Product (GDP) to measure production and consumption of goods and services for macro-economic analysis. That system also helps to produce the database for Sector Accounts and other related aggregates such as transfers from Government Sector to other sectors of the economy. The main emphasis of the System of National Accounts is on the quid pro quo transactions only. Other transactions which are outside the quid pro quo category are classified into a separate category called "transfers". These "transfers" do not necessarily conform to the grants concept as defined in the Grants Economics and therefore they cannot be equated to grants.

Based on the Canadian experience, the "transfers" category contains several "non - quid pro quo" type transactions such as pensions to the retired employees and payments made to other institutions to deliver services on behalf of the government. In the absence of pure "grants" data in a central place, the data of "transfers" which also includes "non-grants" tend to be used as



synonymous to grants. Such an analysis based on "transfers" data of the SNA would give misleading results and policy decisions based on such results would be unrealistic.

In this connection, a quotation from the book of Professor Hicks The Social Framework of the American Economy is worth repeating here. Professor Hicks wrote:

"The method of modern economic investigation is the same as the method of all science. Economics studies facts and seeks to arrange the facts in such ways as make it possible to draw conclusions from them. As always, it is the arrangement which is the delicate operation. Facts arranged in the right way, speak for themselves; unarranged, they are as dead as mutton. One of the main things we have to learn is how to arrange our facts properly"<sup>1</sup>.

It should be noted that not only unarranged facts, but "misclassified" facts would also be as dead as mutton since they would generate misleading results for policy decisions.

Furthermore, over the last several years, grants economy has been increasing in relation to exchange economy. For example, in Canada, the public grants have been growing faster than the expenditure on goods and services. In 1961, the proportion of public grants was about 20% to the combined total government expenditure on goods and services and grants. This proportion of 20% in 1961 increased to about 27% by 1991. (Chart 1) Other

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<sup>1</sup>J.R. Hicks, Albert Gailord Hart and James W. Ford, The Social Framework of the American Economy, Oxford University Press, New York, 1955, p. 5.



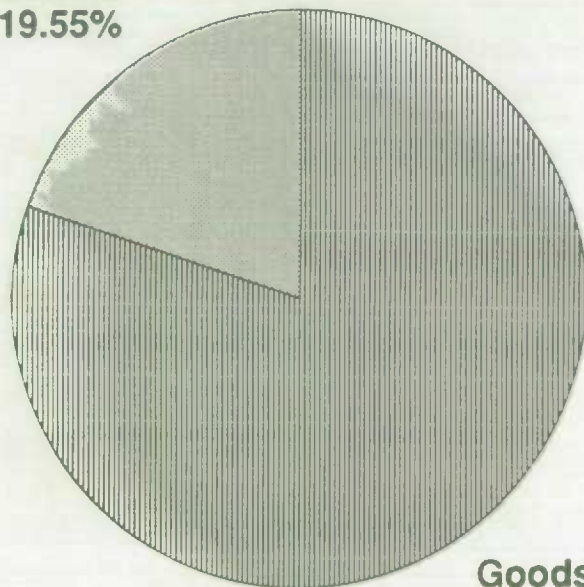
countries might have the same experience. In order to find more about the growth in grants in terms of the flows and the direction of those flows from one sector to the other, an exclusive database organized in readily available statistical tables is essential and is urgently needed to determine the impact on the economy. Well, then, if we need the System of Grant Accounts (SGA), what are some of the essential features which it should provide to the analysts? Let us examine.





## Chart 1. Total Government Expenditures

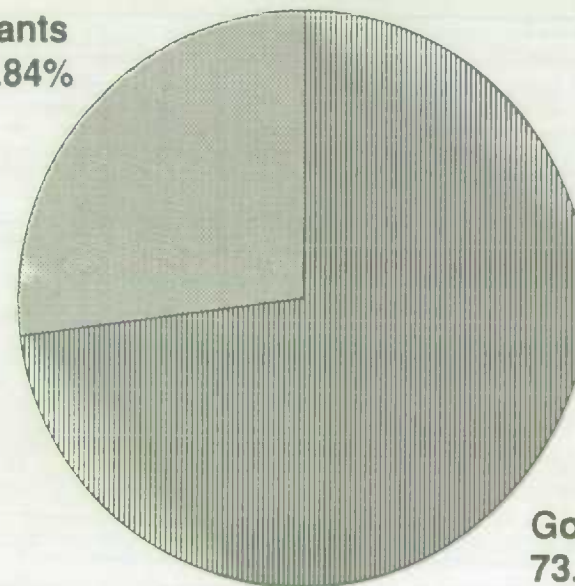
**Grants**  
19.55%



**Goods & Services**  
80.45%

**1961**

**Grants**  
26.84%



**Goods & Services**  
73.16%

**1991**





## II Contents of the System of Grant Accounts (SGA)

### 1. Net Flows

Traditionally, grants are generally analyzed using gross flows. As such a traditional approach will only deal with one side of the transaction, the System of Grant Accounts should be based on the new analytical approach that gross grant outflows (payments) to any sector of the economy should be netted against the grant inflows (receipts) from the same donee sector for better evaluation. The net grant outflow calculated in this manner for any sector of the economy can also be called "Grant Originating" (GO) and it can be expressed by the formula:

$$GO = GP \text{ less } GR$$

where

GO = Grant Originating,

GP = Grant Payments, and

GR = Grant Receipts.

In the context of this formula, a positive GO indicates that the grant originated in the donor sector while a negative GO indicates that the grant originated in the donee sector.

### 2. Four Sector Model

The SGA should also contain the four sector model of the System of National Accounts (SNA) covering the Government (or Public) Sector, the Business Sector, the Personal Sector and



the Non-Resident Sector. It should show the database for the three elements of the formula, namely, GO, GP, and GR for each of the four sectors. Thus, it should show the grant transactions on the basis of inter-sectoral net flows. For example, if the public grants have to be analyzed, the following three dimensions should be produced based on the new approach.

- (i) Grants between the Public Sector and the Business Sector
- (ii) Grants between the Public Sector and the Personal Sector and
- (iii) Grants between the Public Sector and the Non-Resident Sector

If grants between other sectors such as grants between the Business Sector and the Personal Sector, and grants between the Business Sector and the Non-Resident Sector need to be analyzed, similar dimensions could be produced. Let us see some of the advantages of the new analytical approach.

### III Advantages of the New Analytical Approach

By looking at the levels of gross outflows or inflows, only one side of the transaction would be seen, namely, how much is the amount involved in the donor sector outflows. It would not tell us how much is the amount involved in the grant inflow from the donee sector, nor would it indicate the net outflows thereof to give a



total picture of public grants. To illustrate this point, let us take a simple example. If the public grant to the Personal Sector is \$100 and if the Personal Sector gives back \$60 in the form of a grant to the Public Sector (i.e. income taxes), it is the net outflow of \$40 (\$100 less \$60) that reveals the scope of the public grant to the Personal Sector. The Public Sector in this case got back \$60 in the form of a grant from the Personal Sector and therefore, the scope of the public grant is not an outflow of \$100; by the same token, the scope of the personal grant is not an outflow of \$60 either. The net public grant outflow in this case is only \$40.

There is also another advantage of analyzing net outflows of public grants. Such an analysis of net outflows would also capture the changes in the grant giving techniques. For example, let us suppose that the Public Sector, instead of increasing the grant outflows, chooses to decrease the direct taxes (i.e. income taxes) payable by the donee sector to \$45 from \$60. In such an event, to take the first example, the net Public Sector grant outflow will increase to \$55 (\$100 less \$45) although the gross outflow of \$100 remains the same. This change in the net outflow will not be captured in the time-series analysis of gross outflows which show no change at all as they remained at \$100 in both cases.

Sometimes, there may not be a net public grant outflow at all; there may in fact be a net public grant inflow. Let us take





another simple example in which the public grant to the Personal Sector is \$60 while the personal grant to the Public Sector is \$100. There is no net grant outflow from the Public Sector; but there is a net inflow of \$40 from the Personal Sector to the Public Sector. In this case, the Grant Originating is from the Personal Sector as the public grant outflow is smaller than the Personal Sector outflow.

Therefore, in order to obtain a more meaningful and realistic total picture of the grant outflow from each sector, both the gross outflows and the inflows should be studied along with the net flows.

#### IV Advantages of the System of Grant Accounts

Let us then see some of the advantages of the SGA. The SGA provides a coherent framework for recording and presenting the main flows relating to public grants. It organizes, classifies, and presents the grants data for all sectors on the same basis. If it is used for data of all countries, consistent databases can be obtained to draw meaningful conclusions on grant transactions and to study the effect of government grant giving policies.

As most of the grants are between the Public Sector and other sectors, this paper deals only with the grant flows from the Public Sector to the other three sectors and develops the grant flow data for the following three elements based on the Canadian experience:





- (i) Grant Payments (GP)
- (ii) Grant Receipts (GR)
- (iii) Grant Originating (GP-GR)

These three elements are shown in time series for each year to identify trends from 1961 to 1991.

While the System of National Accounts (SNA) measures the production and disposition of goods and services in the economy and reflects the quid pro quo transactions, the proposed System of Grant Accounts (SGA) measures only grants. Both systems are complimentary to one another and are essential for economic analysis. As already mentioned earlier, the SNA classifies transactions which do not fall into the quid pro quo type to a separate category called "transfers". These "transfers" do not necessarily conform to the "grants" concept as they also contain other non-quid pro quo transactions. In order to obtain a database for grants, it is essential to filter the SNA "transfers" through the "grants" concept. This step of filtering SNA transfers would be eliminated if a separate System of Grant Accounts is in place. It would also eliminate the need to change the existing classification procedures of the SNA.

In essence, then, the SGA is useful to analysts and policy makers as it would provide a comprehensive system covering all aspects of the Grants Economy in terms of organizing the data into



consistent statistical series at the national and international levels.

The next section deals with the concepts and data used in this study. It is followed by an analytical section to demonstrate the usefulness of the SGA based on Canadian experience.

## V Concepts and Data for the System of Grant Accounts

### 1. Concepts

#### (i) Grants

"Grants", of course, have the same definition as the one assigned in Grants Economics. In Grants Economics, Boulding et al. define a grant as "a one-way transfer of exchangeables, which in an accounting sense increases the net worth of the recipient and diminishes the net worth of the grantor"<sup>2</sup>. In other words, if A gives something exchangeable to B and if B gives nothing exchangeable to A, the transaction will fall in the definition of a "one-way transfer" or a "grant". As restated by Professor Janos Horvath in his paper on "Rural America and the Grants Economy", the "Grant is such a transaction which involves no recompense". "A decrease of the donor's net worth and an increase of the donee's net worth

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<sup>2</sup>Kenneth E. Boulding, Martin Pfaff, Janos Horvath, "Grants Economics: A Simple Introduction", American Economist, Spring 1972 pp. 19-20.



signify the occurrence of granting"<sup>3</sup>. This is the concept of grants which has been used in this study.

According to this grants concept, direct taxes such as income taxes, succession duties, estate taxes, hospital and medical insurance premiums, which are transfers for the SNA, are regarded as grants which flow to the Public Sector from other sectors.

It should be mentioned in this connection, that indirect taxes have an element of quid pro quo and they are not a part of grants.

(ii) Sectors

The classification of the four sectors is the same as the one used in the System of National Accounts. It is worth repeating here that the four SNA sectors are essentially quite different groups of transactors, but are homogeneous within themselves in their motivation and behaviour. For example, the Government Sector contains the transactions of the public authorities while the Business Sector covers transactions of transactors producing goods and services for sale in the market. The Personal Sector is essentially concerned with persons or households in their capacity as final consumers.

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<sup>3</sup>Janos Horvath, "Rural America and the Grants Economy", American Journal of Agricultural Economics, December 1971, 53 (5), p. 740.





The Non-Resident Sector covers the transactions that take place between these three sectors and the rest-of-the-world.

## 2. Data

The data required for the SGA have been obtained from the Canadian National Income and Expenditure Accounts<sup>4</sup>. Before using the data, the content of transfer payments and receipts have been filtered through the "grants" concept. As a result, several items were disqualified from the category of "grants". The presently published government "transfer payments" to persons have "trust fund payments", and "quid pro quo" payments, besides "grants". The items relating to "trust fund" type and "quid pro quo" have been removed and the balance represents "grants" only.<sup>5</sup> (See Tables 1 and 3 for details)

It should be noted that the data of the unincorporated business are combined with the Personal Sector in the Sector Accounts of the Canadian National Income and Expenditure

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<sup>4</sup>Statistics Canada, National Income and Expenditure Accounts, Annual estimates, 1926-86 Catalogue 13-531, Ottawa, June 1988; Catalogue no. 13-201 Annual, 1978-1989, Ottawa, December 1990, pages 64-69; Annual estimates, Catalogue no. 13-201 Annual, 1980-1991, Ottawa, August 1992.

<sup>5</sup>See the previous study by Murty P.S.K. and Yusuf Siddiqi, Scope of Public Grants Economy in Canada, Statistics Canada, Input-Output Division Technical Series, presented at the joint session of the American Economic Association and the Association for the Study of the Grants Economy held in New Orleans, January 3-5, 1992.





Accounts and the same data are used in this study with some adjustments for conceptual and statistical consistency.<sup>6</sup>

Also, as subsidies have not been split into incorporated and unincorporated businesses in the official statistics, estimates based on the following procedure have been made for this study. (See Table 2)

- (i) The federal payments for agriculture and housing assistance which are shown in the publication have been assumed to be for unincorporated business.
- (ii) The remainder of the subsidy payments by all levels of government have been assumed to be for incorporated business.

The remainder may contain some items of the unincorporated business. Further research is necessary in this regard to examine all the subsidy programs and classify the numerous recipients between incorporated and unincorporated businesses. In the meantime, however, the published data on subsidies have been split on the above basis and used here for statistical consistency between the sectors.

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<sup>6</sup>The unincorporated business data contain two elements, namely, that which is attributable to individuals in the capacity of consumers and that which is attributable to individuals in the capacity of business. These two elements cannot be separated at this time unless considerable research is undertaken.



In summary, then, the published data of the Canadian National Income and Expenditure Accounts, have been adjusted for this study to produce a new paradigm for the following three dimensions. (Tables 4 to 15)

- (i) Grants between the Public Sector and the Personal Sector including unincorporated business (Table 5);
- (ii) Grants between the Public Sector and the Incorporated Business Sector (Table 7); and
- (iii) Grants between the Public Sector and the Non-Resident Sector (Table 10).

The major trends in the data of Grant Originating from 1961 to 1991 are highlighted in the next section. (Tables 16 and 17) The identification of reasons for the trends requires further research and such a task should be the subject of future papers.



TABLE 1. TRANSFERS FROM THE GOVERNMENT SECTOR TO THE PERSONAL SECTOR

<u>AS PUBLISHED</u>	<u>GRANTS</u>	<u>TRUST FUND TYPE</u>	<u>QUID PRO QUO</u>
A.Federal			
1.Family & youth allowances	1.Family and youth allowances		
2.Pensions - World Wars I & II		2.Pensions - World Wars I & II	
3.War veterans' allowances		3.War veterans' allowances	
4.Re-establishment credits		4.Re-establishment credits	
5.Rehabilitation benefits		5.Rehabilitation benefits	
6.Unemployment insurance benefits		6.Unemployment insurance benefits	
7.Pensions to government employees		7.Pensions to government employees	
8.Old age security payments	8.Old age security payments		
9.Grants from Canada Council	9.Grants from Canada Council		
10.Scholarships and grants - research	10.Scholarships and grants - research		
11.Adult occupational training payments	11.Adult occupational training payments		
12.Assistance to immigrants	12.Assistance to immigrants		
13.Prairie farm assistance act	13.Prairie farm assistance act		
14.Payments to western grain producers	14.Payments to western grain producers		
15.Grants to universities			15.Grants to universities
16.Local initiatives program			16.Local initiatives program
17.Grants to native peoples			17.Grants to native peoples
18.Grants to national organizations			18.Grants to national organizations





TABLE 1. TRANSFERS FROM THE GOVERNMENT SECTOR TO THE PERSONAL SECTOR

<u>AS PUBLISHED</u>	<u>GRANTS</u>	<u>TRUST FUND TYPE</u>	<u>QUID PRO QUO</u>
19.Grants - international development assist programs	19.Grants - international development assist prgms		
20.Miscellaneous	20.Miscellaneous		
B.Provincial			
1.Direct relief	1.Direct relief		
2.Old age and blind pensions	2.Old age and blind pensions		
3.Mothers & disabled allowances	3.Mothers & disabled allowances		
4.Workmen's compensation benefits		4.Workmen's compensation benefits	
5.Pensions to government employees		5.Pensions to government employees	
6.Grants to post-secondary educational institutions			6.Grants to post-secondary educational institutions
7.Grants to benevolent associations			7.Grants to benevolent associations
8.Miscellaneous	8.Miscellaneous		
C.Local			
1.Direct relief	1.Direct relief		
2.Grants to charitable & other organizations			2.Grants to charitable & other organizations
D.Canada Pension Plan		D.Canada Pension Plan	
E.Quebec Pension Plan		E.Quebec Pension Plan	



TABLE 2. SUBSIDIES AS PUBLISHED IN OFFICIAL STATISTICS AND THEIR CLASSIFICATION FOR THIS STUDY

<u>AS PUBLISHED</u>	<u>CLASSIFIED TO INCORPORATED BUSINESS</u>	<u>CLASSIFIED TO UNINCORPORATED BUSINESS</u>
A.Federal		
1.Canadian Wheat Board trading loss		1.Canadian Wheat Board trading loss
2.Freight assistance on western feed grains		2.Freight assistance on western feed grains
3.Assistance re storage costs on grain		3.Assistance re storage costs on grain
4.Two-price wheat		4.Two-price wheat
5.Western grain stabilization plan payments		5.Western grain stabilization plan payments
6.Fluid milk		6.Fluid milk
7.Canadian Dairy Commission payments		7.Canadian Dairy Commission payments
8.Hog premiums		8.Hog premiums
9.Agr stabilization board loss or payments		9.Agr stabilization board loss or payments
10.Miscellaneous		10.Miscellaneous
11.Emergency gold mines assistance	11.Emergency gold mines assistance	
12.Movement of coal	12.Movement of coal	
13.Atlantic region freight assistance act	13.Atlantic region freight assistance act	
14.Maritime freight rates act	14.Maritime freight rates act	
15.Other payments to railways	15.Other payments to railways	
16.Grants to Canadian Broadcasting Corporation	16.Grants to Canadian Broadcasting Corporation	
17.Training-on-the-job program	17.Training-on-the-job program	
18.Payts to importers crude oil & petroleum	18.Payts to importers crude oil & petroleum	
19.Petroleum compensation fund payments	19.Petroleum compensation fund payments	
20.Housing assistance		20.Housing assistance
21.Assist to industry for applied research	21.Assist to industry for applied research	





TABLE 2. SUBSIDIES AS PUBLISHED IN OFFICIAL STATISTICS AND THEIR CLASSIFICATION FOR THIS STUDY

<u>AS PUBLISHED</u>	<u>CLASSIFIED TO INCORPORATED BUSINESS</u>	<u>CLASSIFIED TO UNINCORPORATED BUSINESS</u>
22.Grants to Canada Post	22.Grants to Canada Post	
23.Miscellaneous	23.Miscellaneous	
24.Adjustment to accrual basis	24.Adjustment to accrual basis	
B.Provincial	B.Provincial	
25.Total provincial	25.Total provincial	
26.(Of which: adjustment to accrual basis)	26.(Of which: adjustment to accrual basis)	
C.Local	C.Local	



TABLE 3. TRANSFERS FROM THE PERSONAL SECTOR TO THE GOVERNMENT SECTOR

<u>AS PUBLISHED</u>	<u>GRANTS</u>	<u>TRUST FUND TYPE</u>	<u>QUID PRO QUO</u>
A.Federal			
1.Income taxes	1.Income taxes		
2.Succession duty & estate tax	2.Succession duty & estate tax		
3.Employer & employee contribs - ps pensions		3.Employer & employee contributions - ps pensions	
4.Employer & employee contribs - unemployment insurance		4.Employer & employee contributions - unemployment insurance	
5.Other	5.Other		
B.Provincial			
1.Income taxes	1.Income taxes		
2.Succession duties	2.Succession duties		
3.Employer & employee contribs - ps pensions		3.Employer & employee contributions - ps pensions	
4.Employer contributions to workmen's compensation		4.Employer contributions to workmen's compensation	
5.Employer & employee contribs industrial employees vacation		5.Employer & employee contributions industrial employees vacation	
6.Employer & employee contribs to Canada Pension Plan		6.Employer & employee contributions to Canada Pension Plan	
7.Employer & employee contribs to Quebec Pension Plan		7.Employer & employee contributions to Quebec Pension Plan	
8.Motor veh licences & permits			8.Motor vehicle licences & permits
9.Hospital & medical insurance	9.Hospital & medical insurance		
10.Miscellaneous	10.Miscellaneous		
C.Local	C.Local		
D.Hospitals	D.Hospitals		



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TABLE 4. NEW PARADIGM GRANT PAYMENTS FROM GOVERNMENT TO PERSONS &  
UNINCORPORATED BUSINESS (\$ millions)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>I.a. GRANTS FROM PERSONS &amp; UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR - DIRECT TAXES</b>																	
<b>A. FEDERAL</b>																	
1. INCOME TAXES	2050	1994	2102	2465	2612	2846	3473	4167	5415	6302	7081	7889	9228	11121	12278	14477	14283
2. SUCCESSION DUTIES AND ESTATE TAXES	80	93	89	91	101	106	96	112	104	111	136	80	22	9	6	12	22
3. TOTAL FEDERAL	2130	2087	2191	2556	2713	2952	3569	4279	5519	6413	7217	7969	9250	11130	12284	14489	14305
<b>B. PROVINCIAL</b>																	
4. INCOME TAXES	75	322	385	492	743	1057	1431	1755	2049	2509	3062	3496	4057	5034	5741	6570	9373
5. SUCCESSION DUTIES	66	72	82	89	111	109	110	118	137	155	143	150	183	169	150	136	117
6. TOTAL PROVINCIAL	141	394	467	581	854	1166	1541	1873	2186	2664	3205	3646	4240	5203	5891	6706	9490
7. TOTAL GRANTS - DIRECT TAXES	2271	2481	2658	3137	3567	4118	5110	6152	7705	9077	10422	11615	13490	16333	18175	21195	23795
<b>I.b. GRANTS FROM PERSONS &amp; UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR - OTHER</b>																	
<b>A. FEDERAL</b>	2	1	2	2	3	3	3	4	2	2	4	5	6	8	8	11	13
<b>B. PROVINCIAL</b>																	
1. HOSPITAL & MEDICAL INSURANCE PREMIUMS	122	122	125	150	187	197	220	367	544	774	778	683	680	701	687	944	1055
2. MISCELLANEOUS	20	23	24	26	29	31	35	47	70	74	79	80	93	109	115	137	146
3. TOTAL PROVINCIAL	142	145	149	176	216	228	255	414	614	848	857	763	773	810	802	1081	1201
<b>C. LOCAL</b>	32	35	38	43	51	56	63	52	44	46	49	51	56	57	61	76	85
<b>D. HOSPITALS</b>	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	22	25
4. TOTAL GRANTS - OTHER	178	184	192	224	273	290	324	473	664	900	914	823	839	879	875	1190	1324
5. TOTAL GRANTS BY PERSONS & UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR (I.a.7 + I.b.4)	2449	2665	2850	3361	3840	4408	5434	6625	8369	9977	11336	12438	14329	17212	19050	22385	25119





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TABLE 4. NEW PARADIGM GRANT PAYMENTS FROM GOVERNMENT TO PERSONS &  
UNINCORPORATED BUSINESS (\$ millions)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>II. GRANTS FROM GOVERNMENT SECTOR TO PERSONS &amp; UNINCORPORATED BUSINESS</b>																	
<b>A. FEDERAL</b>																	
1. FAMILY AND YOUTH ALLOWANCES	517	529	537	559	599	606	611	615	618	618	619	611	711	1769	1961	1942	2084
2. OLD AGE SECURITY PAYMENTS	597	713	767	871	890	994	1318	1478	1659	1862	2114	2430	2824	3303	3753	4305	4692
3. GRANTS FROM CANADA COUNCIL	9	7	14	12	10	8	16	20	26	30	32	40	38	43	54	60	66
4. SCHOLARSHIPS AND GRANTS- RESEARCH	0	0	17	24	27	52	61	90	89	99	106	100	107	109	121	133	148
5. ADULT OCCUPATIONAL TRAINING PAYMENTS	0	0	0	0	0	0	21	101	121	148	166	150	147	150	171	190	195
6. ASSISTANCE TO IMMIGRANTS	2	1	2	2	2	1	2	4	5	2	2	2	3	1	5	2	2
7. PRAIRIE FARM ASSISTANCE ACT	35	30	15	9	11	6	3	8	9	6	3	3	5	0	0	0	0
8. PAYMENTS TO WESTERN GRAIN PRODUCERS	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9. GRANTS - INTERNAT'L DEV ASSIST PROGS	0	0	0	0	0	0	0	0	0	7	11	16	18	25	32	33	33
10. MISCELLANEOUS	33	37	29	36	19	31	30	43	58	46	134	95	94	124	71	64	248
11. TOTAL FEDERAL	1193	1357	1381	1513	1558	1698	2062	2359	2585	2818	3187	3447	3947	5524	6168	6729	7468
<b>B. PROVINCIAL</b>																	
12. DIRECT RELIEF	34	39	49	59	73	143	257	381	454	535	712	751	828	1014	1200	1392	1611
13. OLD AGE AND BLIND PENSIONS	82	103	103	116	122	101	68	40	24	18	17	23	78	162	274	334	327
14. MOTHERS & DISABLED PERSONS ALLOWANCES	72	81	79	93	108	113	91	69	55	41	50	41	37	43	39	64	72
15. MISCELLANEOUS	50	58	59	64	80	93	200	320	396	391	464	268	268	309	332	317	398
16. TOTAL PROVINCIAL	238	281	290	332	383	450	616	810	929	985	1243	1083	1211	1528	1845	2107	2408
<b>C. LOCAL</b>																	
17. DIRECT RELIEF	75	79	81	80	83	89	98	131	141	211	258	244	248	214	255	270	266
18. SUB-TOTAL GRANTS BY GOVERNMENT SECTOR	1506	1717	1752	1925	2024	2237	2776	3300	3655	4014	4688	4774	5406	7266	8268	9106	10142
19. a. FEDERAL SUBSIDIES TO UNINCORPORATED BUSINESS	94	128	140	143	141	163	180	219	245	295	233	228	268	483	672	591	587
b. CAPITAL ASSISTANCE TO UNINCORPORATED BUSINESS	0	0	0	0	0	0	0	0	0	0	22	46	59	71	205	192	165
20. TOTAL GRANTS FROM GOVERNMENT SECTOR TO PERSONS & UNINCORPORATED BUSINESS	1600	1845	1892	2068	2165	2400	2956	3519	3900	4309	4943	5048	5733	7820	9145	9889	10894



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TABLE 4. NEW PARADIGM GRANT PAYMENTS FROM GOVERNMENT TO PERSONS &  
UNINCORPORATED BUSINESS (\$ millions)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>SUMMARY</b>																	
<b>I. GRANTS BY PERSONS &amp; UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR</b>	2449	2665	2850	3361	3840	4408	5434	6625	8369	9977	11336	12438	14329	17212	19050	22385	25119
<b>II. GRANTS FROM GOVERNMENT SECTOR TO PERSONS &amp; UNINCORPORATED BUSINESS</b>	1600	1845	1892	2068	2165	2400	2956	3519	3900	4309	4943	5048	5733	7820	9145	9889	10894
<b>III. NET GRANTS: FROM PERSONAL SECTOR TO GOVERNMENT SECTOR (I - II)</b>	849	820	958	1293	1675	2008	2478	3106	4469	5668	6393	7390	8596	9392	9905	12496	14225

SOURCE: National Income and Expenditure Accounts, Annual Estimates,  
1926-1986, Catalogue 13-531 Occasional Tables 49, 52 & 55  
1978-1989, Catalogue 13-201 Annual Tables 50, 53 & 56  
1980-1991, Catalogue 13-201 Annual Tables 42, 45 & 48





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TABLE 4. NEW PARADIGM GRANT PAYMENTS FROM GOVERNMENT TO PERSONS &  
UNINCORPORATED BUSINESS (\$ millions)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>I.a. GRANTS FROM PERSONS &amp; UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR - DIRECT TAXES</b>														
<b>A. FEDERAL</b>														
1. INCOME TAXES	13689	16321	19131	22976	25746	26809	28189	32141	37503	41741	46160	50642	58056	58442
2. SUCCESSION DUTIES AND ESTATE TAXES	18	15	1	1	1	0	0	0	0	0	0	0	0	0
3. TOTAL FEDERAL	13707	16336	19132	22977	25747	26809	28189	32141	37503	41741	46160	50642	58056	58442
<b>B. PROVINCIAL</b>														
4. INCOME TAXES	10981	11408	13009	16214	18186	19575	21405	22062	24875	28592	32728	34001	42131	43042
5. SUCCESSION DUTIES	99	94	71	53	56	65	47	65	13	8	7	2	3	2
6. TOTAL PROVINCIAL	11080	11502	13080	16267	18242	19640	21452	22127	24888	28600	32735	34003	42134	43044
7. TOTAL GRANTS - DIRECT TAXES	24787	27838	32212	39244	43989	46449	49641	54268	62391	70341	78895	84645	100190	101486
<b>I.b. GRANTS FROM PERSONS &amp; UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR - OTHER</b>														
<b>A. FEDERAL</b>	15	17	17	15	15	16	18	22	23	25	24	34	35	33
<b>B. PROVINCIAL</b>														
1. HOSPITAL & MEDICAL INSURANCE PREMIUMS	1171	1265	1337	1498	1758	1967	2093	2171	2229	2346	2536	2750	997	1099
2. MISCELLANEOUS	169	190	200	229	262	280	287	278	311	357	417	472	471	539
3. TOTAL PROVINCIAL	1340	1455	1537	1727	2020	2247	2380	2449	2540	2703	2953	3222	1468	1638
<b>C. LOCAL</b>	88	112	136	154	166	175	192	197	224	233	284	264	296	315
<b>D. HOSPITALS</b>	22	30	34	42	56	59	71	84	101	113	129	145	160	176
4. TOTAL GRANTS - OTHER	1465	1614	1724	1938	2257	2497	2661	2752	2888	3074	3390	3665	1959	2162
5. TOTAL GRANTS BY PERSONS & UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR (I.a.7 + I.b.4)	26252	29452	33936	41182	46246	48946	52302	57020	65279	73415	82285	88310	102149	103648



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TABLE 4. NEW PARADIGM GRANT PAYMENTS FROM GOVERNMENT TO PERSONS &  
UNINCORPORATED BUSINESS (\$ millions)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>II. GRANTS FROM GOVERNMENT SECTOR TO PERSONS &amp; UNINCORPORATED BUSINESS</b>														
<b>A. FEDERAL</b>														
1. FAMILY AND YOUTH ALLOWANCES	2224	1696	1812	1958	2204	2303	2393	2492	2524	2552	2595	2632	2711	2824
2. OLD AGE SECURITY PAYMENTS	5238	6085	7020	8213	9304	10137	10999	12150	13148	14006	14801	15718	16705	17954
3. GRANTS FROM CANADA COUNCIL	50	43	44	50	59	65	70	72	81	87	84	96	96	96
4. SCHOLARSHIPS AND GRANTS- RESEARCH	164	170	210	273	330	377	442	459	492	495	521	554	665	691
5. ADULT OCCUPATIONAL TRAINING PAYMENTS	141	77	91	97	97	100	103	132	63	0	0	0	0	0
6. ASSISTANCE TO IMMIGRANTS	2	12	27	26	26	24	0	0	0	0	0	0	0	0
7. PRAIRIE FARM ASSISTANCE ACT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. PAYMENTS TO WESTERN GRAIN PRODUCERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9. GRANTS - INTERNAT'L DEV ASSIST PROGS	48	52	72	80	112	153	173	207	0	0	0	0	0	0
10. MISCELLANEOUS	485	405	480	410	486	1055	1631	1572	1462	1411	1452	1362	2135	3402
11. TOTAL FEDERAL	8352	8540	9756	11107	12618	14214	15811	17084	17770	18551	19453	20362	22312	24967
<b>B. PROVINCIAL</b>														
12. DIRECT RELIEF	1762	1941	2214	2617	3313	4077	4509	4888	5120	5363	5584	5911	6637	7979
13. OLD AGE AND BLIND PENSIONS	309	294	565	615	649	663	673	706	727	813	845	832	882	931
14. MOTHERS & DISABLED PERSONS ALLOWANCES	89	107	116	151	173	204	254	265	295	290	280	282	304	346
15. MISCELLANEOUS	506	638	788	904	957	1047	1249	1501	1642	1769	1955	2243	2358	2575
16. TOTAL PROVINCIAL	2666	2980	3683	4287	5092	5991	6685	7360	7784	8235	8664	9268	10181	11831
<b>C. LOCAL</b>														
17. DIRECT RELIEF	307	337	394	443	532	666	726	773	865	968	1038	1185	1553	2031
18. SUB-TOTAL GRANTS BY GOVERNMENT SECTOR	11325	11857	13833	15837	18242	20871	23222	25217	26419	27754	29155	30815	34046	38829
19. a. FEDERAL SUBSIDIES TO UNINCORPORATED BUSINESS	695	827	605	900	910	1258	1696	1944	2622	4496	3886	3454	2169	2733
b. CAPITAL ASSISTANCE TO UNINCORPORATED BUSINESS	185	262	398	349	824	1306	644	520	247	216	210	184	178	425
20. TOTAL GRANTS FROM GOVERNMENT SECTOR TO PERSONS & UNINCORPORATED BUSINESS	12205	12946	14836	17086	19976	23435	25562	27681	29288	32466	33251	34453	36393	41987



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TABLE 4. NEW PARADIGM GRANT PAYMENTS FROM GOVERNMENT TO PERSONS &  
UNINCORPORATED BUSINESS (\$ millions)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
SUMMARY														
I.GRANTS BY PERSONS & UNINCORPORATED BUSINESS TO GOVERNMENT SECTOR	26252	29452	33936	41182	46246	48946	52302	57020	65279	73415	82285	88310	102149	103648
II.GRANTS FROM GOVERNMENT SECTOR TO PERSONS & UNINCORPORATED BUSINESS	12205	12946	14836	17086	19976	23435	25562	27681	29288	32466	33251	34453	36393	41987
III.NET GRANTS: FROM PERSONAL SECTOR TO GOVERNMENT SECTOR (I - II)	14047	16506	19100	24096	26270	25511	26740	29339	35991	40949	49034	53857	65756	61661

SOURCE: National Income and Expenditure Accounts, Annual Estimates,  
1926-1986, Catalogue 13-531 Occasional Tables 49, 52 & 55  
1978-1989, Catalogue 13-201 Annual Tables 50, 53 & 56  
1980-1991, Catalogue 13-201 Annual Tables 42, 45 & 48





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TABLE 5. PERSONAL & UNINCORPORATED BUSINESS SECTOR GRANTS (\$ millions)

	1	2	3	4	5	6	7
	GRANTS FROM PERSONAL & UNINCORPORATED BUSINESS SECTOR TO GOVERNMENT SECTOR	GRANTS FROM GOVERNMENT SECTOR TO PERSONAL & UNINCORPORATED BUSINESS SECTOR	2 AS % DF 1	NET GRANTS FROM PERSONAL & UNINCORPORATED BUSINESS SECTOR TO GOVERNMENT SECTOR	4 AS % DF 1	4 AS % DF 2	1 AS % DF 2
1961	2449	1600	65.3	849	34.7	53.1	153.1
1962	2665	1845	69.2	820	30.8	44.4	144.4
1963	2850	1892	66.4	958	33.6	50.6	150.6
1964	3361	2068	61.5	1293	38.5	62.5	162.5
1965	3840	2165	56.4	1675	43.6	77.4	177.4
1966	4408	2400	54.4	2008	45.6	83.7	183.7
1967	5434	2956	54.4	2478	45.6	83.8	183.8
1968	6625	3519	53.1	3106	46.9	88.3	188.3
1969	8369	3900	46.6	4469	53.4	114.6	214.6
1970	9977	4309	43.2	5668	56.8	131.5	231.5
1971	11336	4943	43.6	6393	56.4	129.3	229.3
1972	12438	5048	40.6	7390	59.4	146.4	246.4
1973	14329	5733	40.0	8596	60.0	149.9	249.9
1974	17212	7820	45.4	9392	54.6	120.1	220.1
1975	19050	9145	48.0	9905	52.0	108.3	208.3
1976	22385	9889	44.2	12496	55.8	126.4	226.4
1977	25119	10894	43.4	14225	56.6	130.6	230.6
1978	26252	12205	46.5	14047	53.5	115.1	215.1
1979	29452	12946	44.0	16506	56.0	127.5	227.5
1980	33936	14836	43.7	19100	56.3	128.7	228.7
1981	41182	17086	41.5	24096	58.5	141.0	241.0
1982	46246	19976	43.2	26270	56.8	131.5	231.5
1983	48946	23435	47.9	25511	52.1	108.9	208.9
1984	52302	25562	48.9	26740	51.1	104.6	204.6
1985	57020	27681	48.5	29339	51.5	106.0	206.0
1986	65279	29288	44.9	35991	55.1	122.9	222.9
1987	73415	32466	44.2	40949	55.8	126.1	226.1
1988	82285	33251	40.4	49034	59.6	147.5	247.5
1989	88310	34453	39.0	53857	61.0	156.3	256.3
1990	102149	36393	35.6	65756	64.4	180.7	280.7
1991	103648	41987	40.5	61661	59.5	146.9	246.9



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TABLE 6. GRANTS INVOLVING INCORPORATED BUSINESS SECTOR (\$ millions)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>I. GRANTS FROM CORPORATIONS &amp; GOVERNMENT BUSINESS ENTERPRISES TO GOVERNMENT SECTOR:</b>																	
<b>A. FEDERAL</b>																	
1. FEDERAL INCOME TAXES - CORPORATIONS	1325	1293	1395	1560	1643	1762	1744	2088	2380	2257	2463	2885	3628	4993	5350	5011	5099
2. (OF WHICH: PETROLEUM & GAS REVENUE TAX)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. FEDERAL INCOME TAXES - GOVT BUS ENTERPRISES	20	21	17	16	9	12	14	19	22	19	14	16	15	19	30	50	36
4. (OF WHICH: PETROLEUM & GAS REVENUE TAX)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. SUB-TOTAL FEDERAL INCOME TAXES	1345	1314	1412	1576	1652	1774	1758	2107	2402	2276	2477	2901	3643	5012	5380	5061	5135
<b>B. PROVINCIAL</b>																	
6. PROVINCIAL INCOME TAXES	279	408	442	484	499	535	584	682	751	723	825	971	1280	1854	1912	1909	1973
7. PROVINCIAL TAX ON MINING & LOGGING PROFITS	25	31	37	41	46	46	54	63	68	71	44	48	156	185	202	158	130
8. SUB-TOTAL PROVINCIAL INCOME TAXES & TAX ON PROFITS	304	439	479	525	545	581	638	745	819	794	869	1019	1436	2039	2114	2067	2103
9. TOTAL DIRECT TAXES	1649	1753	1891	2101	2197	2355	2396	2852	3221	3070	3346	3920	5079	7051	7494	7128	7238
<b>II. GRANTS FROM GOVERNMENT SECTOR TO INCORPORATED BUSINESS SECTOR:</b>																	
a. SUBSIDIES - ESTIMATED INCORPORATED	851	260	294	326	352	511	493	461	515	535	632	761	946	2313	3528	3083	3252
b. CAPITAL ASSISTANCE - INCORPORATED	0	0	0	0	0	0	0	0	0	0	252	262	318	310	325	443	563
c. SUB-TOTAL - INCORPORATED	251	260	294	326	352	511	493	461	515	535	884	1023	1264	2623	3853	3526	3815
III. NET GRANTS FROM INCORPORATED BUSINESS SECTOR TO GOVERNMENT SECTOR (I.9 - II.3)	1398	1493	1597	1775	1845	1844	1903	2391	2706	2535	2462	2897	3815	4428	3641	3602	3423

SOURCE: National Income and Expenditure Accounts, Annual Estimates,  
1926-1986, Catalogue 13-531 Occasional Tables 50, 56 & 57  
1978-1989, Catalogue 13-201 Annual Tables 51, 57 & 58  
1980-1991, Catalogue 13-201 Annual Tables 43, 49 & 50





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TABLE 6. GRANTS INVOLVING INCORPORATED BUSINESS SECTOR (\$ millions)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>I. GRANTS FROM CORPORATIONS &amp; GOVERNMENT BUSINESS ENTERPRISES TO GOVERNMENT SECTOR:</b>														
<b>A. FEDERAL</b>														
1. FEDERAL INCOME TAXES - CORPORATIONS	5700	6788	8271	9129	8971	9319	11084	11336	10102	11735	11777	12687	11472	9381
2. (OF WHICH: PETROLEUM & GAS REVENUE TAX)	0	0	0	995	1537	1731	2000	1902	399	0	0	0	0	0
3. FEDERAL INCOME TAXES - GOVT BUS ENTERPRISES	37	72	135	194	241	217	235	250	200	129	80	77	183	35
4. (OF WHICH: PETROLEUM & GAS REVENUE TAX)	0	0	0	52	97	93	118	124	38	0	0	0	0	0
5. SUB-TOTAL FEDERAL INCOME TAXES	5737	6860	8406	9323	9212	9536	11319	11586	10302	11864	11857	12764	11655	9416
<b>B. PROVINCIAL</b>														
6. PROVINCIAL INCOME TAXES	2291	2911	3390	3340	2473	2689	3605	3921	4216	5051	5640	5634	4987	4089
7. PROVINCIAL TAX ON MINING & LOGGING PROFITS	160	267	282	133	70	95	60	56	55	75	89	120	209	144
8. SUB-TOTAL PROVINCIAL INCOME TAXES & TAX ON PROFITS	2451	3178	3672	3473	2543	2784	3665	3977	4271	5126	5729	5754	5196	4233
9. TOTAL DIRECT TAXES	8188	10038	12078	12796	11755	12320	14984	15563	14573	16990	17586	18518	16851	13649
<b>II. GRANTS FROM GOVERNMENT SECTOR TO INCORPORATED BUSINESS SECTOR:</b>														
a. SUBSIDIES - ESTIMATED INCORPORATED	3322	4650	7628	8599	8430	8757	10547	9633	7889	7150	7354	7481	9439	11508
b. CAPITAL ASSISTANCE - INCORPORATED	595	567	679	882	2344	3354	3485	3308	3361	2600	2214	2168	1859	1845
c. SUB-TOTAL - INCORPORATED	3917	5217	8307	9481	10774	12111	14032	12941	11250	9750	9568	9649	11298	13353
III. NET GRANTS FROM INCORPORATED BUSINESS SECTOR TO GOVERNMENT SECTOR (I.9 - II.3)	4271	4821	3771	3315	981	209	952	2622	3323	7240	8018	8869	5553	296

SOURCE: National Income and Expenditure Accounts, Annual Estimates, 1926-1986, Catalogue 13-531 Occasional Tables 50, 56 & 57  
1978-1989, Catalogue 13-201 Annual Tables 51, 57 & 58  
1980-1991, Catalogue 13-201 Annual Tables 43, 49 & 50



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TABLE 7. INCORPORATED BUSINESS SECTOR GRANTS (\$ millions)

	1	2	3	4	5	6	7
	GRANTS FROM INCORPORATED BUSINESS SECTOR TO GOVERNMENT SECTOR	GRANTS FROM GOVERNMENT SECTOR TO INCORPORATED BUSINESS SECTOR	2 AS % OF 1	NET GRANTS FROM INCORPORATED BUSINESS SECTOR TO GOVERNMENT SECTOR	4 AS % OF 1	4 AS % OF 2	1 AS % OF 2
1961	1649	251	15.2	1398	84.8	557.0	657.0
1962	1753	260	14.8	1493	85.2	574.2	674.2
1963	1891	294	15.5	1597	84.5	543.2	643.2
1964	2101	326	15.5	1775	84.5	544.5	644.5
1965	2197	352	16.0	1845	84.0	524.1	624.1
1966	2355	511	21.7	1844	78.3	360.9	460.9
1967	2396	493	20.6	1903	79.4	386.0	486.0
1968	2852	461	16.2	2391	83.8	518.7	618.7
1969	3221	515	16.0	2706	84.0	525.4	625.4
1970	3070	535	17.4	2535	82.6	473.8	573.8
1971	3346	884	26.4	2462	73.6	278.5	378.5
1972	3920	1023	26.1	2897	73.9	283.2	383.2
1973	5079	1264	24.9	3815	75.1	301.8	401.8
1974	7051	2623	37.2	4428	62.8	168.8	268.8
1975	7494	3853	51.4	3641	48.6	94.5	194.5
1976	7128	3526	49.5	3602	50.5	102.2	202.2
1977	7238	3815	52.7	3423	47.3	89.7	189.7
1978	8188	3917	47.8	4271	52.2	109.0	209.0
1979	10038	5217	52.0	4821	48.0	92.4	192.4
1980	12078	8307	68.8	3771	31.2	45.4	145.4
1981	12796	9481	74.1	3315	25.9	35.0	135.0
1982	11755	10774	91.7	981	8.3	9.1	109.1
1983	12320	12111	98.3	209	1.7	1.7	101.7
1984	14984	14032	93.6	952	6.4	6.8	106.8
1985	15563	12941	83.2	2622	16.8	20.3	120.3
1986	14573	11250	77.2	3323	22.8	29.5	129.5
1987	16990	9750	57.4	7240	42.6	74.3	174.3
1988	17586	9568	54.4	8018	45.6	83.8	183.8
1989	18518	9649	52.1	8869	47.9	91.9	191.9
1990	16851	11298	67.0	5553	33.0	49.2	149.2
1991	13649	13353	97.8	296	2.2	2.2	102.2



10:05:31 AM  
04-DEC-1992

TABLE 8. COMPARISON OF INCORPORATED BUSINESS SECTOR GRANTS &  
PERSONAL & UNINCORPORATED BUSINESS SECTOR GRANTS (\$ millions)

	GDP AT MARKET PRICES	NET GRANTS FROM INCORPORATED BUSINESS SECTOR TO GOVERNMENT SECTOR	AS PERCENTAGE OF GDP	NET GRANTS FROM PERSONAL & UNINCORP BUSINESS SECTOR TO GOVERNMENT SECTOR	AS PERCENTAGE OF GDP
1961	40886	1398	3.4	849	2.1
1962	44408	1493	3.4	820	1.8
1963	47678	1597	3.3	958	2.0
1964	52191	1775	3.4	1293	2.5
1965	57523	1845	3.2	1675	2.9
1966	64388	1844	2.9	2008	3.1
1967	59064	1903	3.2	2478	4.2
1968	75418	2391	3.2	3106	4.1
1969	83026	2706	3.3	4469	5.4
1970	89116	2535	2.8	5668	6.4
1971	97290	2462	2.5	6393	6.6
1972	108629	2897	2.7	7390	6.8
1973	127372	3815	3.0	8596	6.7
1974	152111	4428	2.9	9392	6.2
1975	171540	3641	2.1	9905	5.8
1976	197924	3602	1.8	12496	6.3
1977	217879	3423	1.6	14225	6.5
1978	241604	4271	1.8	14047	5.8
1979	276096	4821	1.7	16506	6.0
1980	309891	3771	1.2	19100	6.2
1981	355994	3315	0.9	24096	6.8
1982	374442	981	0.3	26270	7.0
1983	405717	209	0.1	25511	6.3
1984	444735	952	0.2	26740	6.0
1985	477988	2622	0.5	29339	6.1
1986	505666	3323	0.7	35991	7.1
1987	551597	7240	1.3	40949	7.4
1988	605906	8018	1.3	49034	8.1
1989	649916	8869	1.4	53857	8.3
1990	667843	5553	0.8	65756	9.8
1991	674388	296	0.0	61661	9.1





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04-DEC-1992

TABLE 9. NET GRANTS AS A PERCENTAGE OF GOVERNMENT EXPENDITURES (\$ millions)

	1 GOVT CURRENT EXPENDITURE G & S	2 GOVT INVESTMENT	3 TOTAL EXPEND (1+2)	4 NET GRANTS PERSONAL & UNINCORP BUSINESS	5 NET GRANTS INCORP BUSINESS SECTOR	6 SUB- TOTAL (4+5)	7 BALANCE (3-6)	8 COL 4 AS % OF GOVT EXP COL 3	9 COL 5 AS % OF GOVT EXP COL 3	10 COL 7 AS % OF GOVT EXP COL 3
1961	6166	1682	7848	849	1398	2247	5601	10.8	17.8	71.4
1962	6567	1900	8467	820	1493	2313	6154	9.7	17.6	72.7
1963	6923	1973	8896	958	1597	2555	6341	10.8	18.0	71.3
1964	7526	1968	9494	1293	1775	3068	6426	13.6	18.7	67.7
1965	8269	2430	10699	1675	1845	3520	7179	15.7	17.2	67.1
1966	9643	2842	12485	2008	1844	3852	8633	16.1	14.8	69.1
1967	11092	2982	14074	2478	1903	4381	9693	17.6	13.5	68.9
1968	12685	3013	15698	3106	2391	5497	10201	19.8	15.2	65.0
1969	14186	3061	17247	4469	2706	7175	10072	25.9	15.7	58.4
1970	16448	3160	19608	5668	2535	8203	11405	28.9	12.9	58.2
1971	18228	3705	21933	6393	2462	8855	13078	29.1	11.2	59.6
1972	20136	3968	24104	7390	2897	10287	13817	30.7	12.0	57.3
1973	22851	4255	27106	8596	3815	12411	14695	31.7	14.1	54.2
1974	27480	5436	32916	9392	4428	13820	19096	28.5	13.5	58.0
1975	33266	6274	39540	9905	3641	13546	25994	25.1	9.2	65.7
1976	38274	6286	44560	12496	3602	16098	28462	28.0	8.1	63.9
1977	43411	6784	50195	14225	3423	17648	32547	28.3	6.8	64.8
1978	47386	7141	54527	14047	4271	18318	36209	25.8	7.8	66.4
1979	52286	7399	59685	16506	4821	21327	38358	27.7	8.1	64.3
1980	59250	8292	67542	19100	3771	22871	44671	28.3	5.6	66.1
1981	68792	9242	78034	24096	3315	27411	50623	30.9	4.2	64.9
1982	78655	10588	89243	26270	981	27251	61992	29.4	1.1	69.5
1983	84571	10350	94921	25511	209	25720	69201	26.9	0.2	72.9
1984	89089	11410	100499	26740	952	27692	72807	26.6	0.9	72.4
1985	95519	12822	108341	29339	2622	31961	76380	27.1	2.4	70.5
1986	100129	12532	112661	35991	3323	39314	73347	31.9	2.9	65.1
1987	105836	12848	118684	40949	7240	48189	70495	34.5	6.1	59.4
1988	114472	13754	128226	49034	8018	57052	71174	38.2	6.3	55.5
1989	123718	15261	138979	53857	8869	62726	76253	38.8	6.4	54.9
1990	133781	16748	150529	65756	5553	71309	79220	43.7	3.7	52.6
1991	140607	16439	157046	61661	296	61957	95089	39.3	0.2	60.5



10:58:49 AM  
26-JAN-1993

TABLE 10. GRANTS INVOLVING NON-RESIDENT SECTOR (\$ millions)

	1	2	3	4	5	6	7
	GDP AT MARKET PRICES	GRANTS FROM NON-RESIDENT SECTOR TO GOVERNMENT SECTOR	GRANTS FROM GOVERNMENT SECTOR TO NON-RESIDENT SECTOR	NET GRANTS FROM NON-RESIDENT SECTOR TO GOVERNMENT SECTOR	COL 3 AS % OF 2	COL 4 AS % OF 2	COL 4 AS % OF 1
1961	40886	116	56	60	48.3	51.7	0.1
1962	44408	125	36	89	28.8	71.2	0.2
1963	47678	127	65	62	51.2	48.8	0.1
1964	52191	140	69	71	49.3	50.7	0.1
1965	57523	167	93	74	55.7	44.3	0.1
1966	64388	204	166	38	81.4	18.6	0.1
1967	59064	218	182	36	83.5	16.5	0.1
1968	75418	209	133	76	63.6	36.4	0.1
1969	83026	234	144	90	61.5	38.5	0.1
1970	89116	269	201	68	74.7	25.3	0.1
1971	97290	278	201	77	72.3	27.7	0.1
1972	108629	287	227	60	79.1	20.9	0.1
1973	127372	322	253	69	78.6	21.4	0.1
1974	152111	430	332	98	77.2	22.8	0.1
1975	171540	465	513	-48	110.3	-10.3	0.0
1976	197924	504	455	49	90.3	9.7	0.0
1977	217879	534	543	-9	101.7	-1.7	0.0
1978	241604	582	910	-328	156.4	-56.4	-0.1
1979	276096	754	645	109	85.5	14.5	0.0
1980	309891	995	680	315	68.3	31.7	0.1
1981	355994	1110	718	392	64.7	35.3	0.1
1982	374442	1178	879	299	74.6	25.4	0.1
1983	405717	1043	983	60	94.2	5.8	0.0
1984	444735	1100	1344	-244	122.2	-22.2	-0.1
1985	477988	1069	1396	-327	130.6	-30.6	-0.1
1986	505666	1675	1525	150	91.0	9.0	0.0
1987	551597	1214	1874	-660	154.4	-54.4	-0.1
1988	605906	1670	2174	-504	130.2	-30.2	-0.1
1989	649916	1537	2052	-515	133.5	-33.5	-0.1
1990	667843	1719	2658	-939	154.6	-54.6	-0.1
1991	674388	1267	2272	-1005	179.3	-79.3	-0.1





12:36:16 PM  
16-FEB-1993

TABLE 11. GRANTS FROM PUBLIC SECTOR (\$millions)

	1	2	3	4	5	4 AS % OF 5
	TO PERSONAL	TO BUSINESS	TO NON-RESIDENT	TOTAL	GDP	
1961	1600	251	56	1907	40886	4.7
1962	1845	260	36	2141	44408	4.8
1963	1892	294	65	2251	47678	4.7
1964	2068	326	69	2463	52191	4.7
1965	2165	352	93	2610	57523	4.5
1966	2400	511	166	3077	64388	4.8
1967	2956	493	182	3631	59064	6.1
1968	3519	461	133	4113	75418	5.5
1969	3900	515	144	4559	83026	5.5
1970	4309	535	201	5045	89116	5.7
1971	4943	884	201	6028	97290	6.2
1972	5048	1023	227	6298	108629	5.8
1973	5733	1264	253	7250	127372	5.7
1974	7820	2623	332	10775	152111	7.1
1975	9145	3853	513	13511	171540	7.9
1976	9889	3526	455	13870	197924	7.0
1977	10894	3815	543	15252	217879	7.0
1978	12205	3917	910	17032	241604	7.0
1979	12946	5217	645	18808	276096	6.8
1980	14836	8307	680	23823	309891	7.7
1981	17086	9481	718	27285	355994	7.7
1982	19976	10774	879	31629	374442	8.4
1983	23435	12111	983	36529	405717	9.0
1984	25562	14032	1344	40938	444735	9.2
1985	27681	12941	1396	42018	477988	8.8
1986	29288	11250	1525	42063	505666	8.3
1987	32466	9750	1874	44090	551597	8.0
1988	33251	9568	2174	44993	605906	7.4
1989	34453	9649	2052	46154	649916	7.1
1990	36393	11298	2658	50349	667843	7.5
1991	41987	13353	2272	57612	674388	8.5



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TABLE 12. GRANTS TO PUBLIC SECTOR (\$ millions)

	1 FROM PERSONAL	2 FROM BUSINESS	3 FROM NON-RESIDENT	4 TOTAL	5 GDP	4 AS % OF 5
1961	2449	1649	116	4214	40886	10.3
1962	2665	1753	125	4543	44408	10.2
1963	2850	1891	127	4868	47678	10.2
1964	3361	2101	140	5602	52191	10.7
1965	3840	2197	167	6204	57523	10.8
1966	4408	2355	204	6967	64388	10.8
1967	5434	2396	218	8048	59064	13.6
1968	6625	2852	209	9686	75418	12.8
1969	8369	3221	234	11824	83026	14.2
1970	9977	3070	269	13316	89116	14.9
1971	11336	3346	278	14960	97290	15.4
1972	12438	3920	287	16645	108629	15.3
1973	14329	5079	322	19730	127372	15.5
1974	17212	7051	430	24693	152111	16.2
1975	19050	7494	465	27009	171540	15.7
1976	22385	7128	504	30017	197924	15.2
1977	25119	7238	534	32891	217879	15.1
1978	26252	8188	582	35022	241604	14.5
1979	29452	10038	754	40244	276096	14.6
1980	33936	12078	995	47009	309891	15.2
1981	41182	12796	1110	55088	355994	15.5
1982	46246	11755	1178	59179	374442	15.8
1983	48946	12320	1043	62309	405717	15.4
1984	52302	14984	1100	68386	444735	15.4
1985	57020	15563	1069	73652	477988	15.4
1986	65279	14573	1675	81527	505666	16.1
1987	73415	16990	1214	91619	551597	16.6
1988	82285	17586	1670	101541	605906	16.8
1989	88310	18518	1537	108365	649916	16.7
1990	102149	16851	1719	120719	667843	18.1
1991	103648	13649	1267	118564	674388	17.6



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TABLE 13. NET GRANTS TO PUBLIC SECTOR AS PERCENTAGE OF GDP (\$ millions)

	1	2	3	4	5	2 AS	3 AS	4 AS	5 AS
	GDP	FROM PERSONAL	FROM BUSINESS	FROM NON-RESIDENT	TOTAL	% OF 1	% OF 1	% OF 1	% OF 1
1961	40886	849	1398	60	2307	2.1	3.4	0.1	5.6
1962	44408	820	1493	89	2402	1.8	3.4	0.2	5.4
1963	47678	958	1597	62	2617	2.0	3.3	0.1	5.5
1964	52191	1293	1775	71	3139	2.5	3.4	0.1	6.0
1965	57523	1675	1845	74	3594	2.9	3.2	0.1	6.2
1966	64388	2008	1844	38	3890	3.1	2.9	0.1	6.0
1967	59064	2478	1903	36	4417	4.2	3.2	0.1	7.5
1968	75418	3106	2391	76	5573	4.1	3.2	0.1	7.4
1969	83026	4469	2706	90	7265	5.4	3.3	0.1	8.8
1970	89116	5668	2535	68	8271	6.4	2.8	0.1	9.3
1971	97290	6393	2462	77	8932	6.6	2.5	0.1	9.2
1972	108629	7390	2897	60	10347	6.8	2.7	0.1	9.5
1973	127372	8596	3815	69	12480	6.7	3.0	0.1	9.8
1974	152111	9392	4428	98	13918	6.2	2.9	0.1	9.1
1975	171540	9905	3641	-48	13498	5.8	2.1	0.0	7.9
1976	197924	12496	3602	49	16147	6.3	1.8	0.0	8.2
1977	217879	14225	3423	-9	17639	6.5	1.6	0.0	8.1
1978	241604	14047	4271	-328	17990	5.8	1.8	-0.1	7.4
1979	276096	16506	4821	109	21436	6.0	1.7	0.0	7.8
1980	309891	19100	3771	315	23186	6.2	1.2	0.1	7.5
1981	355994	24096	3315	392	27803	6.8	0.9	0.1	7.8
1982	374442	26270	981	299	27550	7.0	0.3	0.1	7.4
1983	405717	25511	209	60	25780	6.3	0.1	0.0	6.4
1984	444735	26740	952	-244	27448	6.0	0.2	-0.1	6.2
1985	477988	29339	2622	-327	31634	6.1	0.5	-0.1	6.6
1986	505666	35991	3323	150	39464	7.1	0.7	0.0	7.8
1987	551597	40949	7240	-660	47529	7.4	1.3	-0.1	8.6
1988	605906	49034	8018	-504	56548	8.1	1.3	-0.1	9.3
1989	649916	53857	8869	-515	62211	8.3	1.4	-0.1	9.6
1990	667843	65756	5553	-939	70370	9.8	0.8	-0.1	10.5
1991	674388	61661	296	-1005	60952	9.1	0.0	-0.1	9.0





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16-FEB-1993

TABLE 14. GRANTS FROM PUBLIC SECTOR (\$ millions)

	1	2	3	4	5	6	7
	TOTAL GOVT EXPENDITURES ON G&S	TOTAL PUBLIC GRANTS	TOTAL GOVT EXPENDITURES G&S & GRANTS	GROSS INFLOW	1 AS % OF 3	2 AS % OF 3	4 AS % OF 3
1961	7848	1907	9755	4214	80.5	19.5	43.2
1962	8467	2141	10608	4543	79.8	20.2	42.8
1963	8896	2251	11147	4868	79.8	20.2	43.7
1964	9494	2463	11957	5602	79.4	20.6	46.9
1965	10699	2610	13309	6204	80.4	19.6	46.6
1966	12485	3077	15562	6967	80.2	19.8	44.8
1967	14074	3631	17705	8048	79.5	20.5	45.5
1968	15698	4113	19811	9686	79.2	20.8	48.9
1969	17247	4559	21806	11824	79.1	20.9	54.2
1970	19608	5045	24653	13316	79.5	20.5	54.0
1971	21933	6028	27961	14960	78.4	21.6	53.5
1972	24104	6298	30402	16645	79.3	20.7	54.7
1973	27106	7250	34356	19730	78.9	21.1	57.4
1974	32916	10775	43691	24693	75.3	24.7	56.5
1975	39540	13511	53051	27009	74.5	25.5	50.9
1976	44560	13870	58430	30017	76.3	23.7	51.4
1977	50195	15252	65447	32891	76.7	23.3	50.3
1978	54527	17032	71559	35022	76.2	23.8	48.9
1979	59685	18808	78493	40244	76.0	24.0	51.3
1980	67542	23823	91365	47009	73.9	26.1	51.5
1981	78034	27285	105319	55088	74.1	25.9	52.3
1982	89243	31629	120872	59179	73.8	26.2	49.0
1983	94921	36529	131450	62309	72.2	27.8	47.4
1984	100499	40938	141437	68386	71.1	28.9	48.4
1985	108341	42018	150359	73652	72.1	27.9	49.0
1986	112661	42063	154724	81527	72.8	27.2	52.7
1987	118684	44090	162774	91619	72.9	27.1	56.3
1988	128226	44993	173219	101541	74.0	26.0	58.6
1989	138979	46154	185133	108365	75.1	24.9	58.5
1990	150529	50349	200878	120719	74.9	25.1	60.1
1991	157046	57612	214658	118564	73.2	26.8	55.2



09:38:48 AM  
01-MAR-1993

TABLE 15. NET GRANTS TO PUBLIC SECTOR AS PERCENTAGE OF GOVERNMENT EXPENDITURES  
ON GOODS & SERVICES (\$ millions)

	1 GOVERNMENT EXPENDITURES ON G & S	2 FROM PERSONAL	3 FROM BUSINESS	4 FROM NON-RESIDENT	5 TOTAL	2 AS % OF 1	3 AS % OF 1	4 AS % OF 1	5 AS % OF 1
1961	7848	849	1398	60	2307	10.8	17.8	0.8	29.4
1962	8467	820	1493	89	2402	9.7	17.6	1.1	28.4
1963	8896	958	1597	62	2617	10.8	18.0	0.7	29.4
1964	9494	1293	1775	71	3139	13.6	18.7	0.7	33.1
1965	10699	1675	1845	74	3594	15.7	17.2	0.7	33.6
1966	12485	2008	1844	38	3890	16.1	14.8	0.3	31.2
1967	14074	2478	1903	36	4417	17.6	13.5	0.3	31.4
1968	15698	3106	2391	76	5573	19.8	15.2	0.5	35.5
1969	17247	4469	2706	90	7265	25.9	15.7	0.5	42.1
1970	19608	5668	2535	68	8271	28.9	12.9	0.3	42.2
1971	21933	6393	2462	77	8932	29.1	11.2	0.4	40.7
1972	24104	7390	2897	60	10347	30.7	12.0	0.2	42.9
1973	27106	8596	3815	69	12480	31.7	14.1	0.3	46.0
1974	32916	9392	4428	98	13918	28.5	13.5	0.3	42.3
1975	39540	9905	3641	-48	13498	25.1	9.2	-0.1	34.1
1976	44560	12496	3602	49	16147	28.0	8.1	0.1	36.2
1977	50195	14225	3423	-9	17639	28.3	6.8	0.0	35.1
1978	54527	14047	4271	-328	17990	25.8	7.8	-0.6	33.0
1979	59685	16506	4821	109	21436	27.7	8.1	0.2	35.9
1980	67542	19100	3771	315	23186	28.3	5.6	0.5	34.3
1981	78034	24096	3315	392	27803	30.9	4.2	0.5	35.6
1982	89243	26270	981	299	27550	29.4	1.1	0.3	30.9
1983	94921	25511	209	60	25780	26.9	0.2	0.1	27.2
1984	100499	26740	952	-244	27448	26.6	0.9	-0.2	27.3
1985	108341	29339	2622	-327	31634	27.1	2.4	-0.3	29.2
1986	112661	35991	3323	150	39464	31.9	2.9	0.1	35.0
1987	118684	40949	7240	-660	47529	34.5	6.1	-0.6	40.0
1988	128226	49034	8018	-504	56548	38.2	6.3	-0.4	44.1
1989	138979	53857	8869	-515	62211	38.8	6.4	-0.4	44.8
1990	150529	65756	5553	-939	70370	43.7	3.7	-0.6	46.7
1991	157046	61661	296	-1005	60952	39.3	0.2	-0.6	38.8





## VI Analysis of Grant Originating

Based on the System of Grant Accounts developed in this paper, the Grant Originating has been calculated for Personal Sector, Business Sector, and Non-Resident Sector and analyzed in the context of GDP and government expenditure on goods and services as shown in Tables 16 and 17. The data of the Business Sector includes only incorporated business as the unincorporated business is merged with the Personal Sector.

It can be observed that, from 1961 to 1991, there was a significant upward trend in the level of Grant Originating from the Personal Sector in contrast to a sharp declining trend in the Grant Originating from the Business Sector.

The position in the Non-Resident Sector is quite different. In 1961, there was Grant Originating from the Non-Resident Sector of about \$60 million, but this position changed and by 1987, there was a consistent net inflow to the Non-Resident Sector from the Public Sector. (Tables 15 and 16)

In terms of GDP (i.e. GDP at market prices), the Business Sector's net outflow was 3.4% of the GDP in 1961 and it declined steadily to almost nothing by 1991. In sharp contrast, the Grant Originating from the Personal Sector was only about 2% of GDP in 1961 but rose steadily to about 9% by 1991. (Table 16 and Chart 2)



## Chart 2. Net Grants as Percentage of G.D.P.

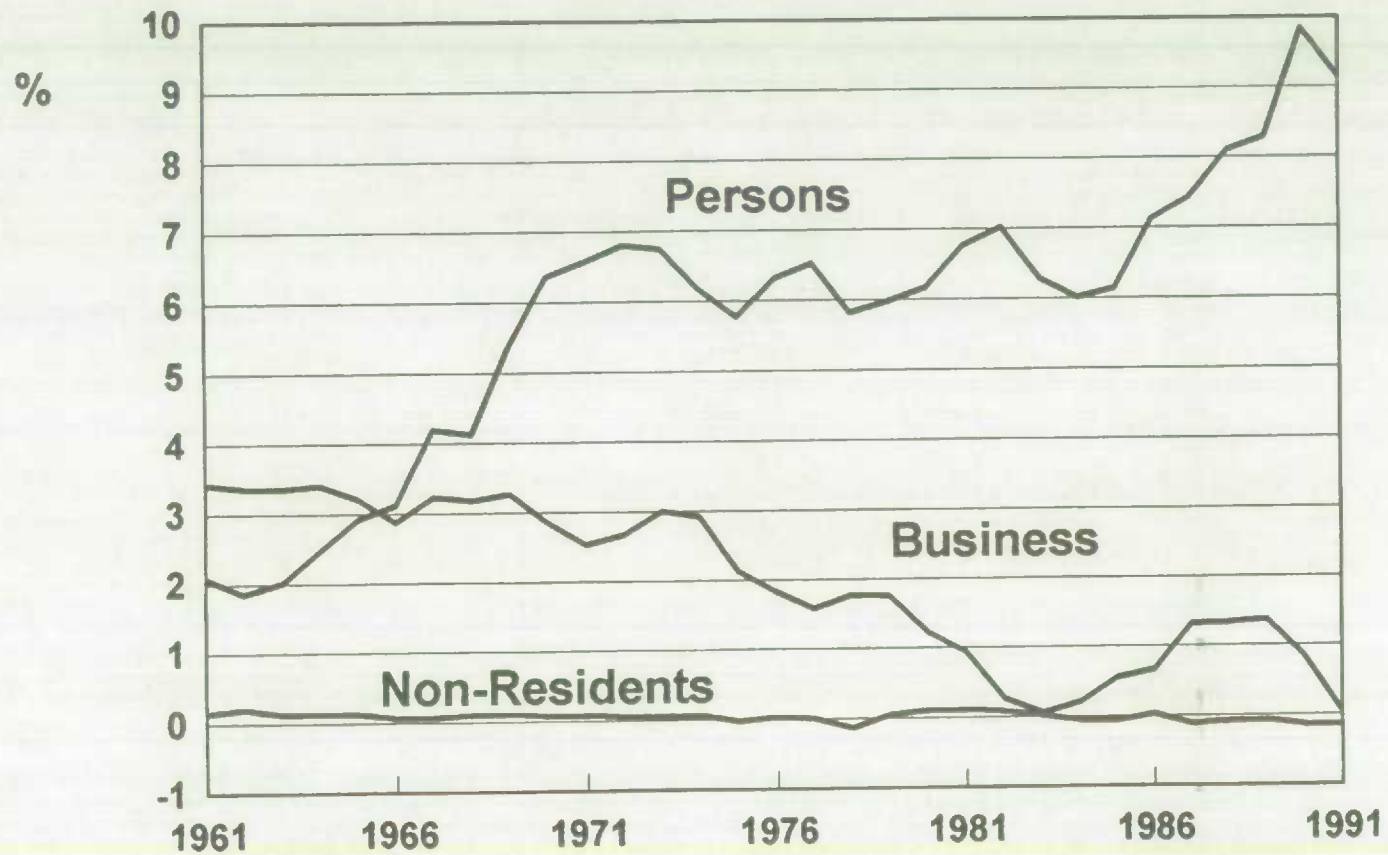




Table 16: GDP and Grant Originating for Selected Years

Year	GDP at market prices	Grant Originating in				% of Grant Originating to GDP			
		Personal Sector	Business Sector	Non- Resident Sector	Total	Personal Sector	Business Sector	Non- Resident Sector	Total
\$ Millions									
1961	40,886	849	1,398	60	2,307	2.1%	3.4%	0.1%	5.6%
1971	97,290	6,393	2,462	77	8,932	6.6%	2.5%	0.1%	9.2%
1981	355,994	24,096	3,315	392	27,803	6.8%	0.9%	-0.1%	7.8%
1990	667,843	65,756	5,553	-939	70,370	9.8%	0.8%	-0.1%	10.5%
1991	674,388	61,661	296	-1,005	60,952	9.1%	0.04%	-0.1%	9.0%

The Grant Originating in terms of government expenditure on goods and services (as measured in the final demand table of the GDP) reveals interesting relationships. (Chart 3)

In 1961, the Grant Originating in the Personal Sector was about 11% of government expenditure on goods and services while that of the Business Sector was about 18%. By 1991, this relationship changed significantly as the G.O. in the Personal Sector rose from about 11% in 1961 to about 39% in 1991; in contrast, the GO in the Business Sector declined from about 18% in 1961 to less than 1% (0.2%) in 1991. (Table 17)

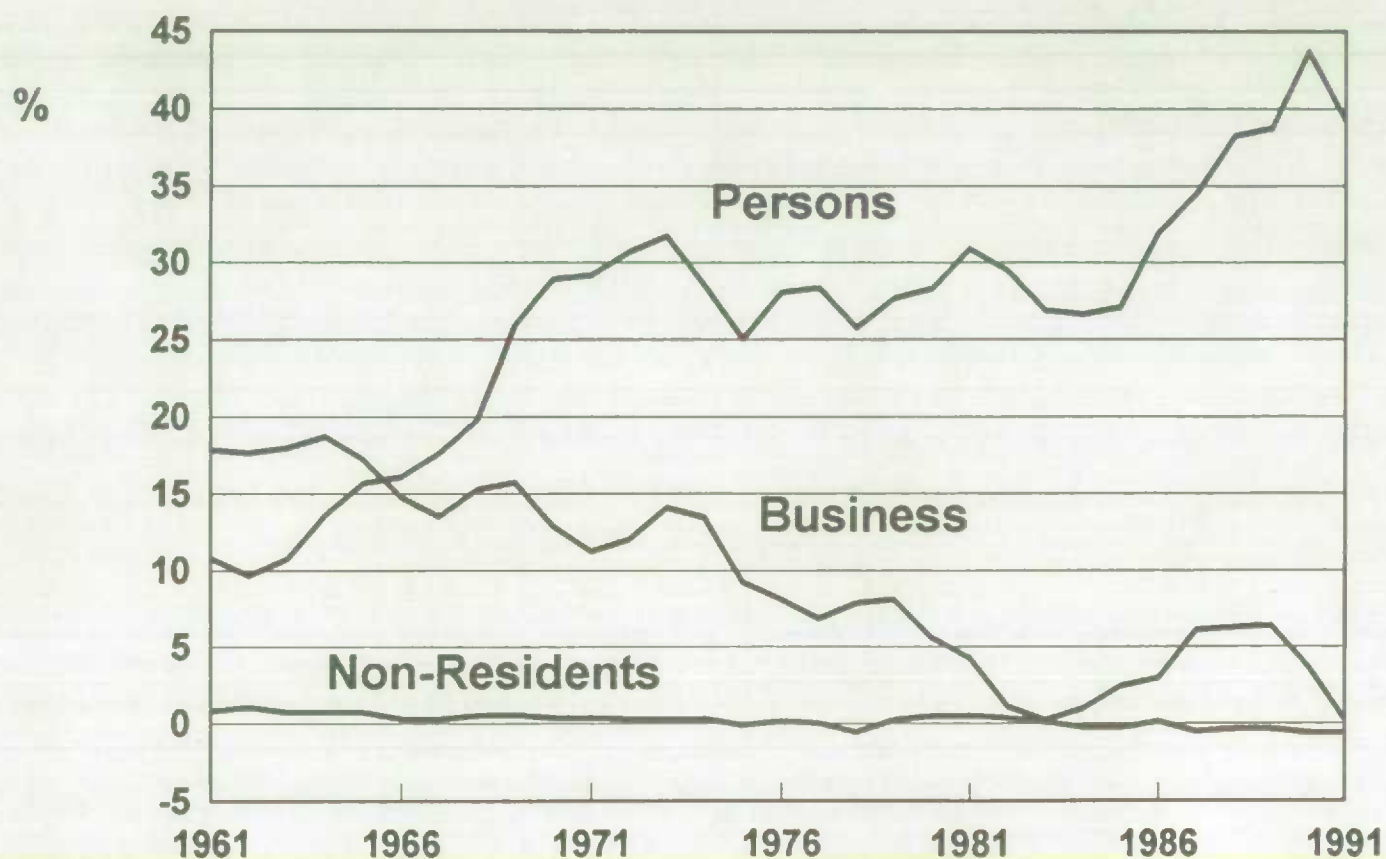
Table 17: Government Expenditure and Grant Originating for Selected Years

Year	Government Expenditure on Goods and Services	Grant Originating in				% of Grant Originating to Government Expenditure on Goods and Services			
		Personal Sector	Business Sector	Non-Resident Sector	Total	Personal Sector	Business Sector	Non-Resident Sector	Total
\$ Millions									
1961	7,848	849	1,398	60	2,307	10.8%	17.8%	0.8%	29.4%
1971	21,933	6,393	2,462	77	8,932	29.1%	11.2%	0.4%	40.7%
1981	78,034	24,096	3,315	392	27,803	30.9%	4.2%	0.5%	35.6%
1990	150,529	65,756	5,553	-939	70,370	43.7%	3.7%	-0.6%	46.7%
1991	157,046	61,661	296	-1,005	60,952	39.3%	0.2%	-0.6%	38.8%





**Chart 3. Net Grants as Percentage of Government Expenditures on G & S**





The experience with the Non-Resident Sector is quite different. In 1961, the GO in the Non-Resident Sector was positive which indicated that the outflow (GP) was larger than the inflow (GR). In 1991, there was no GO in the Non-Resident Sector as the (GR) i.e. grant payments of the Public Sector were larger than the GP i.e. payments by the Non-Resident Sector. This shift in the flow of net grants would not be detected if we analyze only the gross flows.

## VII Summary and Conclusions

In conclusion, there are several advantages in recording and presenting grant transactions within a consistent accounting framework called the "System of Grant Accounts" (SGA).

1. The main advantage is that the System of Grant Accounts (SGA) eliminates the need to adjust the database of the System of National Accounts (SNA) for grants. SNA "transfers" data cannot be equated to "grants" of the Grants Economics as they contain other transactions such as pensions which do not fit into the grants concept. This is because the SNA measures mainly quid pro quo transactions and any transaction which does not fit into the quid pro quo concept is routed through "transfers". Instead of trying to change the System of National Accounts which is rather difficult, a separate System of Grant Accounts which conforms solely to grant definitions and analytical





requirements should be developed to provide ready information for policy formulation on grants.

2. If a separate System of Grant Accounts is not developed, the official statistics of government transfer payments and receipts measured in the System of National Accounts should be filtered through the grants concept to obtain a new paradigm consisting of grants for a realistic evaluation of the grant transactions.
3. If these two options are not followed i.e. if a separate System of Grant Accounts is not developed and if the SNA "transfers" are not filtered through the grants concept, analysts and policy makers would not have the true "grants" data for their studies; they would have only the data for all "non quid pro quo" type transactions grouped together in one category called "transfers". The use of such unadjusted "transfers" data for grants analysis and policies is not recommended as misleading results would emerge.
4. The net outflow measurement based on the GO concept reflects the effect of implicit grants involved in the government policies of grant giving. If, instead of giving a certain amount of grant, the government decides to give a reduction in the grant inflow from the sector concerned, the effect of



the implicit grant transaction for which data are normally not available would be hidden.

5. Also, as the grant outflows from the Personal and Business Sectors are mainly income taxes, the GO concept can be used in studies concerning income taxation. For example, grants originating can be shown by income groups or occupational groups depending on the data availability. In other words, this study can be done between any sub-group of the Business Sector and the Public Sector. It can also be done between any sub-group of the Personal Sector and the Public Sector.
6. Based on the data of net grant outflows in Canada, the Grant Originating in the Personal Sector is much larger than that of the Business Sector and grew significantly from 1961 to 1991. The net outflows of the Business Sector declined substantially from about 3% of GDP in 1961 to about 1% in 1990, while those of the Personal Sector increased significantly from 2% in 1961 to 10% in 1990. The highlights of the analysis presented here contain only the major trends in the data of 3 decades from 1961 to 1991. The identification of reasons for the trends requires further research and such a task should be the subject of future papers.



7. *If a consistent framework such as the one recommended here is used for the System of Grant Accounts by all countries, inter-country comparison of public grants would be possible without making any adjustments. Inter-country comparison of public grants would be essential particularly for countries within specific trading blocs such as those in the North American Free Trade Agreement (NAFTA), because grants affect the export prices of the countries concerned. It is hoped that the sectoral Grant Accounts developed in this study at the macro-level using the four sector model of the SNA would be very useful for policy analysts, policy makers and other researchers of the participating countries.*





## REFERENCES

1. Hicks, J.R., Albert Gailord Hart, and James W. Ford, The Social Framework of the American Economy, Oxford University Press, New York, 1955.
2. Horvath, Janos "On the Evaluation of International Grants Policy", Public Finance, 1971.
3. Horvath, Janos "Rural America and the Grants Economy", American Journal of Agricultural Economics, December 1971.
4. Boulding, Kenneth E., Martin Pfaff, and Janos Horvath, "Grants Economics: A Simple Introduction", American Economist, Spring 1972.
5. Statistics Canada, National Income and Expenditure Accounts, Volume 3, A Guide to the National Income and Expenditure Accounts, Definitions - Concepts - Sources - Methods, Catalogues 13-549E, Ottawa, September 1975.
6. Statistics Canada, National Income and Expenditure Accounts, Annual estimates, 1926-86, Catalogue 13-531, Ottawa, June 1988.
7. Murty, P.S.K. and Yusuf Siddiqi, Government Expenditures on Goods and Services and Transfer Payments in Canada, 1961-1985, presented at the joint session of the American Economic Association and the Association for the Study of the Grants Economy held in Atlanta on December 30, 1989.
8. Statistics Canada, National Income and Expenditure Accounts, Annual estimates, 1978-89, Catalogue 13-201, Ottawa, December 1990.
9. Murty, P.S.K. and Yusuf Siddiqi, A New Paradigm to Analyze Commodity Indirect Taxes and Subsidies, 1986-1989, Statistics Canada. Ottawa, April 5, 1991.
10. Murty, P.S.K., New Paradigm to Analyze Government Transfer Payments with Special Reference to Canada, presented at the Second Annual Convention of the International Congress of Political Economists held in Boston, January 9-12, 1991.
11. Murty, P.S.K. and Yusuf Siddiqi, Scope of Public Grants Economy in Canada, presented at the joint session of the American Economic Association and the Association for the Study of the Grants Economy held in New Orleans, January 3-5, 1992.



## REFERENCES (CONT'D)

12. Statistics Canada, National Income and Expenditure Accounts, Annual estimates 1980-1991, Catalogue 13-201, Ottawa, August 1992.
13. Murty, P.S.K. and Yusuf Siddiqi, Transfer Payments in National Accounts and Grants Economics, presented at the 22nd General Conference of the International Association for Research in Income and Wealth held in Flims, Switzerland, August 30 - September 5, 1992.
14. Murty, P.S.K., Scope of the Public Sector Grants in the Canadian Economy Revisited, presented at the Annual meetings of the Allied Social Service Associations in Anaheim, California, January 5-7, 1993.
15. Murty, P.S.K., A New Approach to Analyze Public Sector Grants: A Case Study of Canada, presented at the fourth Annual Convention of Congress of Political Economists (COPE) International at the American University of Paris, France, January 8-12, 1993.
16. Murty, P.S.K., A Blueprint for the System of Grant Accounts, presented at the Research Seminar, College of Business Administration, Butler University, Indianapolis, Indiana, USA, February 19, 1993.





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- (2)  
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- (3)  
Durand R. and Rioux R., *"Estimating Final Demand Expenditure at Factor Cost and Net of Tax Price Indices in the Canadian Input-Output Tables"*, Paper Presented at the International Round Table on Taxes and the CPI, Ottawa, Input-Output Division, Statistics Canada, March 3, 1987.
- (4)  
Siddiqi Y., Murty P.S.K., Dlena 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, Statistics 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., G  n  reux 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., Dlena 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-E)

Mercier P., Durand R. and Diaz A., "*Specification of parameters for the National Input-Output Model*", Input-Output Division, Statistics Canada, December 1991.

(18-F)

Mercier P., Durand R. et Diaz A., "*Sp  cification des param  tres du mod  le d'entr  es-sorties nationale*", Division des entr  es-sorties, Statistique Canada, D  cembre 1991.

(19-E)

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

(19-F)

Siddiqi Y., Murty P.S.K., "*Imp  ts indirects sur les biens et services dans les comptes d'entr  es-sorties du Canada, 1984*", Division des entr  es-sorties, Statistique Canada, 6 Juillet 1989.

(20)

Siddiqi Y., Murty P.S.K., "*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/Les taux de taxe actuels et les indices de prix net*", Feature Article/Etude spéciale, Canadian Economic Observer/L'observateur économique canadien, November 1990/Novembre 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.

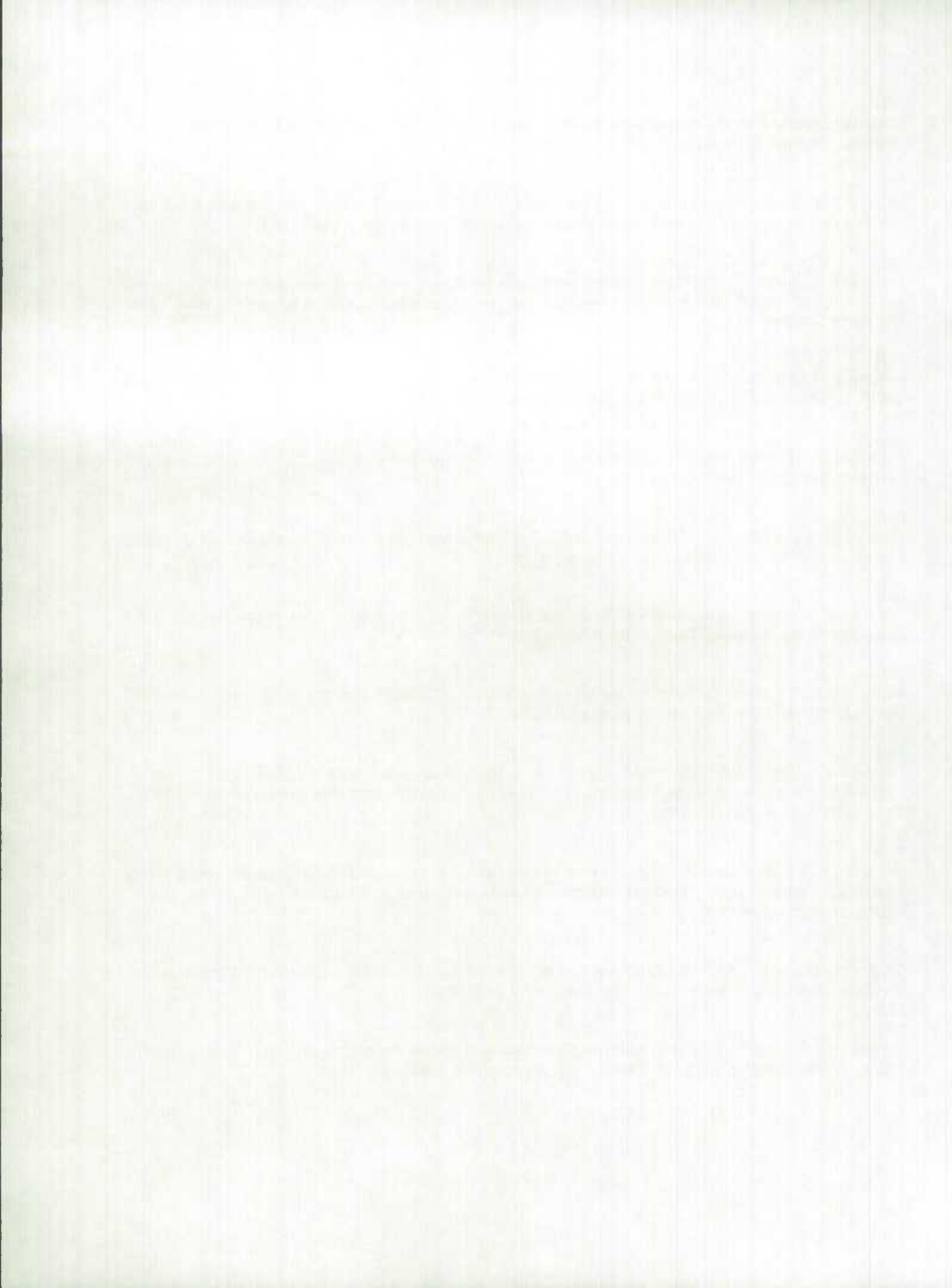
(32)

Siddiqi Y., Murty P.S.K., "*Federal Sales Tax in the Canadian Input-Output Accounts*", Input-Output Division, Statistics Canada, July 1989, Draft, (Out of Print).

(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 Intra-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/Les subventions gouvernementales accordées aux Industries"*, Input-Output Division/Division des entrées-sorties, Statistics Canada/Statistique Canada, Reprint from Canadian Economic Observer/Réimprimé de l'Observateur Economique Canadien, May 1991/Mai 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 1991.

(43)

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

(44-E)

Dionne M., *"Measuring Capital Depreciation"*, Input-Output Division, Statistics Canada, July, 1991.

(44-F)

Dionne M., *"Mesure de la dépréciation du capital"*, Division des entrées-sorties, Statistique Canada, Novembre 1991.

(45)

Murty P.S.K. and Siddiqi Y., *"Scope of Public Grants Economy in Canada"*, Input-Output Division, Statistics Canada, December 6, 1991. (Draft).



(46)

Murty P.S.K. et Siddiqi Y., "*Portée de l'économie des subventions publiques au Canada*", Division des entrées-sorties, Statistique Canada, le 6 décembre 1991. (Projet).

(47)

Gill K. and Larose M., "*Sources and Methods of Estimating Employment by Input-Output Industries for the years 1961 to 1988*", Input-Output Division, Statistics Canada, November 1991.

(48)

Murty P.S.K. and Siddiqi Y., "*Transfer Payments in National Accounts and Grants Economics*", Input-Output Division, Statistics Canada, May 25, 1992.

(49)

"*Interprovincial and International Trade Flows of Goods 1984-1988/Flux du commerce International et Interprovincial des biens 1984-1988*", Input-Output Division/Division des entrées-sorties, Statistics Canada/Statistique Canada, June 1992/ Juin 1992.

(50)

Messinger Hans., "*Canada's Interprovincial Trade Flows of Goods, 1984-88/Flux du commerce Interprovincial des biens au Canada 1984-1988*", Input-Output Division/Division des entrées-sorties, Statistics Canada/Statistique Canada, January 1993/Janvier 1993. Forthcoming/A venir.

(51)

Webber Maryanne., "*Estimating Total Annual Hours Worked from the Canadian Labour Force Survey*", Labour and Household Surveys Analysis Division and Input-Output Division, Statistics Canada, April 1983.

(52-E)

"*Statistics Canada's Input-Output Model: General description, Critical Analysis of Partially Closed Version and Alternative Solutions*", Input-Output Division, Statistics Canada, June 1991.

(52-F)

"*Le modèle d'entrées-sorties de Statistique Canada: présentation générale, analyse critique de la version avec fermeture partielle et solutions de rechange*", Division des entrées-sorties, Statistique Canada, Juin 1991.

(53)

Murty, P.S.K., "*A New Approach to Analyze Public Sector Grants: A Case Study of Canada*", Input-Output Division, Statistics Canada, January 1993.

(54)

Murty, P.S.K., "*Scope of the Public Sector Grants in the Canadian Economy Revisited*", Input-Output Division, Statistics Canada, January 1993.

(55)

Murty, P.S.K., "*A Blueprint for the System of Grant Accounts*", Input-Output Division, Statistics Canada, February 1993.

(56)

Murty, P.S.K., "*The Need for a System of Grant Accounts*", Input-Output Division, Statistics Canada, March 1993.











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