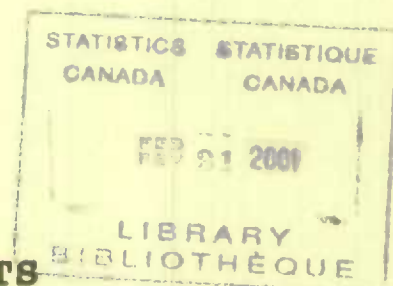


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JANUARY 3, 1991



**NEW PARADIGM TO ANALYZE
GOVERNMENT TRANSFER PAYMENTS
WITH SPECIAL REFERENCE TO CANADA**

BY

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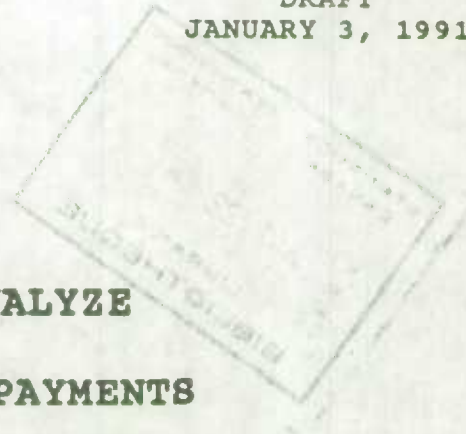
Prepared for presentation at the Second Annual Convention, Congress of Political Economists (COPE) International to be held January 9-12, 1991 at the Boston Park Plaza Hotel, Boston, MA. The views expressed in this paper are those of the author and not necessarily those of Statistics Canada.

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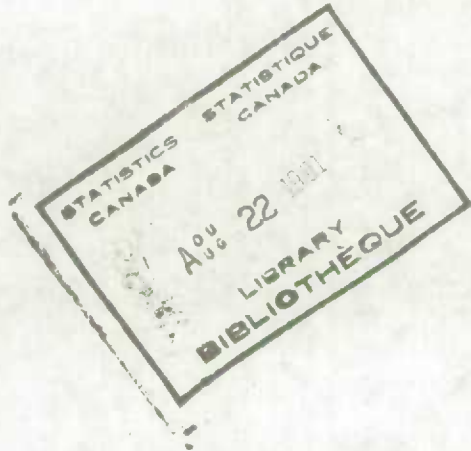
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NEW PARADIGM TO ANALYZE
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structure is to provide a database based on actual transactions which would meet with the criteria of "grants", so that the new database would contain only the legitimate grants in the transfer payments category for an objective analysis.

III Present Structure of Government Transfer Payments

1. United Nations SNA (1968)

According to the present internationally accepted macro-economic structure, (namely, United Nations Manual, A System of National Accounts), the Income and Outlay Account of the General Government is expected to show separate data for expenditure on goods and services as well as current transfers to other sectors of the economy.³ The category of current transfers is supposed to include all unrequited transfers.⁴ These transfers are supposed to be sub-divided into those made to the non-resident sector and those made to the resident sectors. By following the Guidelines of the U.N. Manual, the countries are free to develop their own detailed structure. As is the case with many countries, Canada developed its own System of National Accounts (CSNA) within these U.N. guidelines and from here on, I will make reference to the Canadian SNA (CSNA) and the analytical structure that is available there for the new paradigm.

³United Nations, A System of National Accounts, Studies in Methods, Series F No. 2, Rev. 3, New York, 1968, Table C, Account 3, General Government, P. 161.

⁴Ibid, PP. 127-129.

2. Canadian SNA

In the Canadian SNA, government transfer payments are shown in four parts:

- (i) to personal sector
- (ii) to business sector
 - subsidies
 - capital assistance
- (iii) to non-residents
- (iv) interest on the public debt
- (v) current transfers from one level of government to the other.

As the last item of transfer payments represents inter-governmental transfers which appears in both donor and recipient sub-sectors, it is eliminated in the consolidated accounts of the total government sector to avoid duplication. Therefore, the analysis of transfer payments covers only four categories. The total government spending as per the consolidated accounts is shown in Appendix VIII.

For this study, all the items classified to transfer payments to persons (Appendix I) have been examined. By definition, these items should have no element of quid pro quo. However, when the concepts of grants economics are applied to those items, some of them did not meet with the criteria established for "grants". It was also noticed that some other items constituted disbursements

from the funds contributed by the recipients themselves, but deferred for payment to a later date. In addition, some other items constituted indirect purchase of goods and services through third parties for delivery of public services to the society.

Let me explain what these transactions are. As shown in Appendix II, the transfer payments to the personal sector include payments such as pension payments for past service, Canada and Quebec pension payments, old age security payments, workers' compensation payments, and unemployment insurance benefits. These are contributory plans to which both employees and employers contribute a certain proportion of wages and salaries. The employers' contributions are quid pro quo expenditures of the government as they are merely "deferred payments" to employees for their services. As such, they are already treated in the Government Accounts as well as in the CSNA as supplementary labour income payments in the year during which the contributions were made. Employees, on the other hand, are contributing with the understanding that they will get back the funds when they are qualified to receive them. For example, when the employees retire, they expect to get back pensions from the funds to which they contributed, whether the government kept "in trust" the funds collected from the contributions or whether they spent them. In effect, then, the contributions in these cases are intended to be held in "trust funds" until the contributors qualify for payment. The government transfer payments out of these "trust funds" are

merely the return of funds received for the purpose of disbursements at the appropriate time. In this sense, the contributions are similar to bank deposits while the payments are synonymous to withdrawals. When we deposit money in a bank account and then withdraw it, the withdrawal cannot be considered a transfer or grant. By giving a label of transfer payments to the government payments out of the "trust funds", transfer payments to the personal sector are over-estimated. Therefore, both the contributions and investment income thereof (which are currently included in government revenues) and the repayments (which are currently included in transfer payments) should be excluded from the government sector's current operations accounts and reclassified to the status of "trust fund" transactions. Following this procedure would eliminate the payments for pensions, unemployment insurance, Canada and Quebec pensions, and worker's compensation benefits from the present category of government transfer payments to persons. The amounts involved in these cases are substantial, about \$32 billion or 43% of the published total transfer payments to persons of \$76 billion in 1989. (Appendix V)

In addition to these payments, there are also transfer payments to universities, post-secondary educational institutions, and other non-profit organizations including Indian Bands, which contain an element of quid pro quo. (Appendix III) The purpose of such transfer payments is to enable these institutions to finance their operations in order to deliver specific services to the

personal sector.

In these cases, the government, instead of delivering specific services to the public directly, are choosing to provide those services through third parties. The funds given for the delivery of those services should not be regarded as grants under Grants Economics concepts. Though the services are not delivered directly by government, an exchange takes place and the element of quid pro quo is present between the donor and the recipient. Therefore, the transfer payments to those institutions should not be included in "grants", but should be regarded as government expenditure on goods and services. The amounts involved are about \$13 billion or 17% of the published transfer payments to persons in 1989. (Appendix V)

After removing the items falling into the two categories just described namely, payments out of "trust funds" -- (Appendix II), and payments that have the element of quid pro quo (Appendix III), the items that are qualified to be left in transfer payments or grants category are derived (Appendix IV). They include: family and youth allowances; old age security payments; scholarships and fellowships; adult occupational training payments; assistance to immigrants and farmers; international assistance; payments to the blind and disabled persons and the like. These grants amounted to about \$30 billion or 40% of the published total transfer payments to persons in 1989 (Appendix V). This means, the remaining 60% of the published total did not belong to the grants category in 1989.

The content analysis of the published transfer payments to persons is summarized in Appendix V for 1961-1989 period. The trust fund type payments which were about 33% of the total in 1961 rose to 43% in 1989. The quid pro quo - indirect payments which were 11% in 1961 also rose to 17% in 1989. However, grants which were 55% in 1961 declined substantially to 40% in 1989. This shows that the apparent growth in the published figures of transfer payments to persons was in the items which did not belong to grants category.

IV New Structure of Government Transfer Payments to Persons

It appears from the analysis presented thus far that due to the lack of conceptually accurate classification, some items, which have no apparent quid pro quo, are thrown into one catch-all category of "transfer payments" in the existing structure. The new paradigm suggested here rectified the deficiency and reclassified the items into three types:

- (1) Transfer payments which meet with the definition of grants in the Grants Economics literature. (i.e. no quid pro quo)
- (2) Payments which are similar to "trust fund" withdrawals.
- (3) Payments which have an element of quid pro quo indirect.

In addition, governments have a tendency to show net expenditure in their official Public Accounts. By "net", I mean, gross expenditure offset by revenue or would-be revenue. For example, in Canada, low-income families are allowed to deduct child

tax credits and sales tax credits from their income taxes. So, the transfer payments to persons will be understated in these cases as they do not appear in that category. Income taxes will also be understated to the extent of these credits. In fact, both income taxes and transfer payments to persons should be grossed-up to the extent of those credits. Therefore, there should be an additional item called "Grants offset from income taxes", which should be added to "transfer payments to persons". As data in this regard are not readily available, further research is needed to develop the necessary statistical information. Therefore, while the item is recognized for the new paradigm, the analysis is deferred until the required database is developed for these credits which are similar to transfer payments to persons.

V Analysis of Database

First, the data as published in the existing official National Income and Expenditure Accounts are analyzed. Then, analysis of the reclassified data developed in this study is presented under the heading "Reclassified data base".

(i) National Accounts Basis

In Canada, the total government spending was about \$12 billion in 1961. Of this, about \$8 billion or 64% was expenditure on goods and services, and the remainder of \$4 billion or 36% was transfer payments including interest on public debt (Appendix VIII; Tables Q1 and Q2).

By 1989, the total spending rose to about \$286 billion (a 24-fold increase). Of this, the expenditure on goods and services increased to \$137 billion (a 17-fold rise). However, the proportion of expenditure on goods and services to total spending declined from 64% in 1961 to 48% in 1989. While the capital expenditures dropped from 14% of total spending in 1961 to 5% in 1989, the current expenditures declined from 51% in 1961 to 42% in 1989. (Table Q2)

However, the transfer payments including interest on the public debt which were 36% of total spending in 1961 rose to 52% in 1989 (Table Q2).

Of the total transfer payments, the personal sector's share was the largest. But the figure has declined, from about 63% in 1961 to 50% in 1989.

Interest on the public debt -- the second largest component of transfer payments -- increased its share of the total from about 27% in 1961 to 38% in 1989.

The business sector's share of transfer payments also increased from about 8% in 1961 to 9% in 1989. Transfers to the business sector are of two types: subsidies and capital assistance. Subsidies remained the same at 8% in 1961 and 1989, while capital assistance increased from about 1% in 1961 to 2% in 1989.

All such transfer payments which have an element of exchange or "quid pro quo: indirect" have been identified and payments which have grant elements derived.⁸

These "grant" payments after reclassification of the published data made up only about 4% of GDP in 1961 and 5% in 1989 and they are much smaller than the payments before reclassification which amounted to about 7% in 1961 and 12% in 1989.

Transfer Payments to the Business Sector

As already observed, transfer payments to the business sector contain subsidies and capital assistance.

By definition, subsidies are grants on "current account by the government to (a) private enterprises and public corporations, or (b) unincorporated public enterprises when clearly intended to compensate for losses resulting from the price policies of government".⁹

⁸These grant payments are: Federal Family and Youth Allowances, Old Age Security Payments, Grants from Canada Council, Adult Occupational Training Payments, Assistance to Immigrants, Prairie Farm Assistance Act (existed up to 1973 in small amounts), Payments to Western Grain Producers (existed in 1962 only), and Grants in support of International Assistance Programs; Provincial Government Direct Relief, Old Age and Blind Pensions, Mother's and Disabled Persons Allowances, Miscellaneous; and Local Government Direct Relief.

⁹United Nations, National Accounts Statistics: Main Aggregates and Detailed Tables 1984, New York 1986, P.XVI.

In other words, government subsidies compensate the business sector for the cost of production while the lower prices benefit consumers. There is no direct exchange of goods or services between business back to government.

In Canada, agriculture and related services, transportation, communication, finance and real estate industries account for a major portion of the total subsidies.

The payments for capital assistance to business are intended for new machinery and equipment and new construction. The business sector receives the funds and incurs a capital outlay, and there is no exchange of goods or services between business back to the government.

The analysis presented thus far pertains to the database currently published in the Canadian System of National Accounts. But there are certain transactions which may not be revealed in the present database. Those transactions involve rebates or offsets to the taxes payable by business or personal sectors. For example, the government may wish to give some relief to low or middle income groups for the income tax burden through sales tax remittances by allowing a deduction of a portion of the sales tax. In a transaction of this type, the government is actually giving a transfer payment -- in the form of a grant to the low and middle income groups. In theory, the transfer should be recorded as an

increase in personal income as well as the income taxes to show the actual transactions beneath the surface. At the present time, these adjustments are not made to the data published in the Canadian SNA.

Consider another example involving the business sector. The government may wish to reduce the burden of rents to low and middle income families by asking the business sector to reduce the property taxes owed to the government. The business sector is in effect receiving a subsidy to compensate for the lost revenue due to lower rents. But, of course, the property taxes actually paid as well as subsidies should be increased in those instances. The Canadian SNA does not reflect such transactions. Similar practices can be observed in the case of business capital tax credits and they should all be rectified to determine the actual level of subsidies.

Sometimes, the losses of some government business enterprises are written off by the government by appropriating funds equal to those losses. These appropriations might not be routed as subsidies in the official Public Accounts. This practice understates the levels of subsidy payments to industries, because the business sector is in effect receiving a subsidy to the extent of losses written-off.

All these transactions underestimate the government grants by the "shortcut" methods in the settlement of accounts. Although such short-cut methods are necessary for administrative purposes, for statistical purposes and above all for the economic analysis purposes, the subsidies data should be adjusted upward to reflect those short-cuts. Otherwise the potential factors contributing to trends are lost and meaningful economic analysis of published totals will become rather difficult.

Transfer Payments to Non-resident Sector

This category contains official contributions to the international agencies for aid programs and pensions to Canadians and others living abroad.

The pensions are for past services rendered to the government and they should be classified as "trust fund" type payments mentioned earlier. As they do not fit into the "grant" concept, they have been removed from the transfer payments category.

(iii) Analysis of Reclassified database

The grant element derived in this study excluding interest on the public debt constituted about 5% of GDP in 1961. This proportion increased to about 7% in 1989 (Table Q3). Interest on the public debt which was about 3% in 1961 rose to 9%, in 1989. Together, grants including interest on the public debt were about 8% of the GDP in 1961 and increased to 16% in 1989 (Table Q3).

The current treatment of interest on the public debt as a transfer or a grant deserves to be re-evaluated because this flow can be considered exchange of services from borrowers to lenders.¹⁰ This controversial subject is discussed at length by Goldberg in a recent paper, but no definite conclusion is available at this stage¹¹. However, there are some encouraging developments in the recently proposed revisions to the present United Nations System of National Accounts which provide alternatives to the existing treatment. One proposal under consideration assumes "that interest flows consist of two parts, including a service charge and a net interest flow."¹² It is hoped that this alternative treatment will be consistently applied to all sectors of the economy.

Based on the preceding analysis, total adjusted government spending can be divided into:

- expenditure on goods and services (current and capital);
- Transfer Payments to Persons:
- Trust Fund type payments;

¹⁰Preetom S. Sunga, "The Treatment Of Interest And Net Rents In The National Accounts Framework," International Association For Research in Income and Wealth, The Review of Income and Wealth, March 1967.

¹¹S.A. Goldberg, "The Treatment of Interest in the National Accounts: A Review," International Association For Research in Income and Wealth, Nineteenth General Conference, August 1985. (Mimeographed paper)

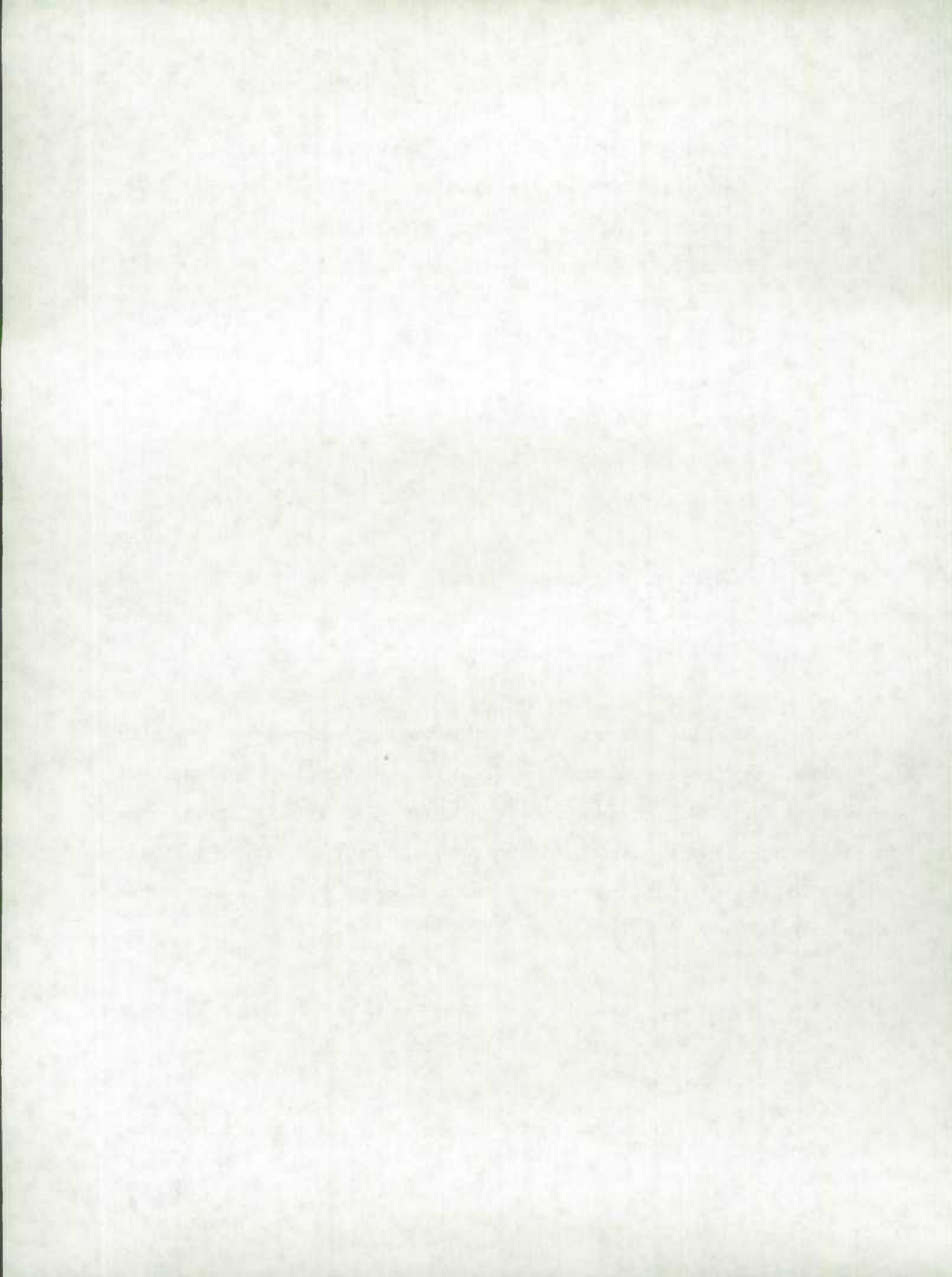
¹²See paper by Vu Viet, on "The Revision of SNA, Input-Output Standards in the SNA Framework", International Association For Research in Income and Wealth, Nineteenth General Conference, August 1985, P.44. (Mimeographed paper)

- quid pro quo payments for services obtained through institutions as explained;
- grants payments
- Transfer Payments to Business Sector:
 - Subsidies;
 - Capital assistance;
- Transfer Payments to non-residents:
 - Trust Fund type payments;
 - grants payments;
- Interest on the public debt.

The "Trust Fund" type payments are eliminated from the total spending.¹³ Tables N, Q1, Q2, and Q3 show the data for 1961 and 1989 before and after the adjustments.

If we exclude "Trust Fund" type payments from the transfer payments, total government spending as a percentage of GDP was about 28% in 1961 and rose to 39% by 1989 (Table Q3). Unadjusted data (as published) show total spending at about 30% in 1961 rising to 44% by 1989. Thus, spending levels are much lower based on the adjusted data.

¹³Revenues of these "Trust Funds" should also be excluded from the Government revenues to be consistent with the expenditures and to derive deficit or surplus.



By including the transfer payments classified as "quid pro quo - indirect", government current expenditure on goods and services, stood at about \$8 billion in 1961 and \$150 billion in 1989 (Table Q1). As a percentage of GDP, these expenditures represented about 20% in 1961 and 23% in 1989 (Table Q3). Unadjusted figures were lower at about 19% in 1961 and 21% in 1989 of the GDP.

The adjusted transfer payments to persons (which are synonymous to grants) amounted to about \$2 billion in 1961 or about 4% of GDP and they rose to \$30 billion or about 5% of GDP by 1989 (Tables Q1 and Q3). By contrast, the unadjusted data showed much higher figures, about \$3 billion in 1961 or about 7% of GDP and \$76 billion in 1989 or about 12% of GDP (See Tables Q1, Q2, and Q3).

The adjusted total transfer payments to all sectors (i.e. personal, business, and non-residents) excluding interest on public debt stood at about \$2 billion in 1961 or about 5% of GDP and increased to \$46 billion by 1989 or about 7% of GDP. The unadjusted data were about \$3 billion or about 8% of GDP in 1961 and \$92 billion in 1989 or about 14% of GDP.

Table N Total Spending Before and After Adjustments Based on
Reclassification of Transfer Payments with adjustments.

	<u>Before Adjustments</u>		<u>After Adjustments</u>	
	<u>1961</u>	<u>1989</u>	<u>1961</u>	<u>1989</u>
	\$ Millions			
Current Expenditures	6,166	121,242	6,166	121,242
Adjustments: Add: "quid pro quo -indirect"			+308	+13,054
Sub-total	6,166	121,242	6,474	134,296
Capital Inventories	1,674	15,283	1,674	15,283
	8	-3	8	-3
Sub-total: Goods & Services	7,848	136,522	8,156	149,576
Transfers				
(a) to persons Less	2,724	75,901	2,724	75,901
(i) trust fund type payments			-910	-32,448
(ii) "quid pro quo indirect"			-308	-13,054
(iii) Equals: Adjusted total to persons			1,506	30,399
(b) to business	370	14,010	370	14,010
(c) to non-residents Less	77	2,340	77	2,340
(i) trust fund type payments			-21	-344
(ii) Equals: Adjusted total to non-residents			56	1,996
Interest on public debt	1,184	57,718	1,184	57,718
Sub-total: Transfers including interest on the public debt	4,355	149,969	3,116	104,123
Total spending	12,203	286,491	11,272	253,699

