Input-output Division

Technical Series

Input-Output
Technical Series

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

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

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

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

A SYSTEM OF GRANT ACCOUNTS

by

P.S.K. Murty

 # 59

September, 1993

AEA2391994

A SYSTEM OF GRANT ACCOUNTS

by

P.S.K. Murty

A SYSTEM OF GRANT ACCOUNTS

by

P.S.K. Murty

A SYSTEM OF GRANT ACCOUNTS

by

P.S.K. Murty

PREFACE

This paper presents a preliminary manual for "A System of Grant Accounts", so that, if the system is implemented by statistical agencies, a reliable database on grant transactions can be developed and made available through official publications for economic analysis. The manual outlines the System of Grant Accounts (SGA for short) and covers concepts, classification, a framework and procedures needed to compile grants data at the macro level for the four main sectors of the economy (i.e. Persons, Business, Government and Non-Residents) and summarizes the sectoral transactions into a set of nine standard analytical tables. These tables are aimed at producing sectoral grants data showing the gross and net flows for both domestic and international transactions of the economy. They will help to answer crucial questions such as who is giving grants, who is receiving them, and what is the net outflow from the donors to the donees. The manual also introduces a new approach of analyzing grant net flows by a Grant Originating formula (GO for short) and applies it to the four sector model. The four sector model used here is the same as the one used in the System of National Accounts, so that consistency in the sectoral data can be maintained between the exchange economy measured in the System of National Accounts (SNA) and grants economy measured in the System of Grant Accounts

(SGA). The two systems, namely, the System of National Accounts (SNA) and the System of Grant Accounts (SGA), are complementary to each other and they represent the total macro-economic analytical framework by providing vital statistical information to researchers regarding exchange economy on the one hand in the SNA and about the grants economy on the other hand in the SGA. The availability of database for the total economy as well as for the grants economy within a consistent sectoral framework will enable researchers to focus more attention to the grants and their analysis. The database will also be useful to the policy makers to evaluate the effectiveness of the income redistribution transactions in the economy.

Over 25 years ago, in 1968, the late Professor Boulding mentioned in his presidential address delivered to the Michigan Economics Association that the grants economy was surprisingly neglected in economic studies despite its increasing importance. He observed as follows on the state of the grants economy at that time.

> *"Economists from the very beginning of their science have been preoccupied with the phenomenon of exchange..... If we concentrate on the exchangeable rather than on the act of exchange itself, however, a whole new area of social life opens up which ought to be in the province of the economists and yet which has been surprisingly neglected in economic studies. This is the sector of economic life that may be called "Grants Economy", that is, the study of that segment of the total economy which deals with one-way transfers of exchangeables."*

> ....

> *"The size of the grants economy has been rising quite rapidly at both the domestic and the international levels. Within the United States, Dr. Martin Pfaff has estimated that grants have risen from about 3% of the gross national product in 1910 to about 13% today. This is a major structural change, comparable in size to the decline of agriculture or the rise of the war-industry. At the international level also, the volume of grants has risen substantially in the last generation or so especially with the development of foreign aid. In the*

light of its rising quantitative importance, the neglect of the grants economy by economists, and indeed by all social scientists, is all the more surprising"[1].

The points which were made in that presidential address are very valid even today. The quantitative importance of grants has been rising while the attention given to the subject has not kept pace with it. For example, let us take the area of statistics. The exchange economy is adequately covered in the System of National Accounts by statistical agencies of many countries which have fully developed National Income Accounts and Sector Accounts and all the essential statistics about production and disposition of goods and services are made available through key indicators such as the Gross Domestic Product, factor income, investment, consumption, imports, exports, inventory changes, etc. In contrast, a suitable grants database within a consistent and systematic framework in a time series on a continuous basis is still lacking even today. There is, however, some information on transactions of "transfers" in the System of National Accounts, but unfortunately some of the items included in those data do not meet the grant criteria. At best, those items included in those "transfers" of the SNA can be properly called as "non-quid pro quo transactions", but not as "grant transactions". Consequently, all those items have to be filtered through grant concepts before they can be used for grant analysis. This lack of adequate database on grants is a serious gap in the area of statistics and poses a problem to analyze the income redistribution transactions of the economy. The possible reason for such a state of the

---

[1] *Kenneth E. Boulding, "The Grants Economy", presidential address delivered to the Michigan Economics Association, Grand Vally State College, Michigan, March 22, 1968 at the Annual Meeting of the Michigan Academy of Science, Arts, and Letters, Michigan Academician, Vol. 1, No. 1, Winter 1969, P. 3.*

grants economy may perhaps be, as Professor Boulding observed in his speech, that "economists from the very beginning of their science have been preoccupied with the phenomenon of exchange"[2] and that "it may well be that the reason for the neglect of the grants economy by economists is that it does not fit well into their existing theoretical framework, which is built primarily around the concept of exchange, as we see for instance in the case of welfare economics"[3].

Whatever reasons there might be for the present situation, the fact remains that something ought to be done to focus more attention on the content of the grants economy in the same way as the exchange economy for its proper evaluation in line with its growing importance.

As observed earlier, in the case of exchange economy, a database is available in a fully developed System of National Accounts and analysts use that basic central source for their studies. Such a convenience, namely, the availability of a suitable database on grants in one central source (e.g. an official publication) with a systematic classification framework of donors and donees at the macro level seems to be the prerequisite to attract more attention to the subject and to facilitate further studies and analysis.

---

[2] *Ibid.*, P. 3.

[3] *Ibid.*, P. 3.

Therefore, as a first step, it is necessary to implement a System of Grant Accounts by all countries as well as international statistical agencies in order to create and release the database in a time series (e.g. annually) through official publications in the form of standard analytical tables. The availability of such data in official sources would, I believe, activate the interest on the subject and generate more analysis and dialogue on the subject of grants economy. In fact, as we all know, the same position is true for any discipline, because without such adequate and proper statistical databases quantifying and summarizing the transactions, it will be difficult, if not impossible to conduct any analytical studies.

In summary, the proposed System of Grant Accounts would, on its implementation, give equal importance to the grants economy similar to what the System of National Accounts gave to the exchange economy and provide time series of grants data at the national and international levels in official documents within a systematic framework. Besides such availability of data for further studies, the grant transactions at the macro level would also be more transparent by donors and donees. Accountability would be facilitated as the essential information on income redistribution transactions would be available not only to answer crucial questions, but also to monitor budgets and costs and benefits associated with grants.

The conceptual and analytical framework recommended in this System of Grant Accounts was implemented in an earlier study entitled "The Need For A System of Grant Accounts" presented at the 19th Annual Meetings of the Eastern Economic Association, Washington DC, during March 1993. In that study, the SGA conceptual framework was applied on an experimental basis to the Canadian SNA Government transfers data i.e. transfers to and from the Government Sector. The results which were presented in that study are repeated here just to give an idea of the Canadian Grants Economy at least on a partial basis. The coverage is partial because the study covers only the SNA transfers, but does not cover the grants arising in situations such as bankruptcies, loans losses, etc for which special research studies and additional surveys are needed to compile the necessary information. Unless and until those situations are also covered by the appropriate studies and surveys, a complete and comprehensive picture of the Grants Economy would not be available for analysis.

With this known limitation, let me now present some results of the partial data just to give a comparative idea of the growing Grants Economy and the shifts that have been taking place during the last 3 decades as far as the Government Sector is concerned. (See Appendix 8)

Based on the Canadian experience, the net Grant Originating (GO) in 1961 from the Personal, Business, and Non-Resident Sectors to the Government Sector was at a positive level for a combined total of about $2.3 billion which was 5.6% of the GDP.

In other words, the Government Sector was the net beneficiary while the other sectors played the roles of donors in the Canadian Grants Economy. (Appendix 8) However, by 1991, that position changed significantly. First, there was a marked upward trend in the level of net Grant Originating from the Personal Sector in contrast to a sharp declining trend in the net Grant Originating from the Business Sector. The personal sector's net Grant Originating which was $849 million in 1961 or 2.1% of the GDP rose substantially by 1991 to about $62 billion or 9.1% of the GDP; but the Business Sector's net Grant Originating which was about $1.4 billion in 1961 or 3.4% of the GDP declined by 1991 to a low level of about $300 million with an insignificant proportion to GDP.

Second, the Non-Resident Sector's role of a donor in 1961 got shifted to that of a donee as it became the net beneficiary by 1991. In 1961, the Non-Resident Sector's net Grant Originating was $60 million while in 1991, it became the net beneficiary to the extent of $1 billion.

These results indicating which sectors of the economy were the net donors or net beneficiaries would not be available without the new Grant Originating (GO) formula advocated in the SGA, because the traditional method of analyzing gross flows would show only one side of the picture.

It should be noted, however, that the results of the Canadian experience mentioned above are based on partial database covering the SNA transfers only. If other areas such as bankruptcies and loan losses etc. are also included, the magnitude of the Canadian Grants Economy would certainly be larger. Therefore, further research is needed to pull together all the data of "other areas" (i.e. bankruptcies, loan losses, etc.) to develop a complete picture of the Grants Economy. It is recommended that national statistical agencies and international organizations should give top priority to this area of research for the development of the separate grants database in view of the growing importance of the Grants Economy.

This proposed System of Grant Accounts would also be a fitting tribute to the late professor Boulding, the father of Grants Economics.

<div align="right">

P.S.K. Murty

</div>

A SYSTEM OF GRANT ACCOUNTS

by

P.S.K. Murty[4]

I Introduction

"Grant", of course, has 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"[5]. 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 "grant" or a "one-way transfer". 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 signify the occurrence of granting"[6].

In the context of this grant concept, quantitative data are needed on grant flows cross-classified by donors and donees to know who is giving, who is receiving, and what are the net grant outflows after offsetting the receipts from the payments for a complete evaluation of the transactions by types of donors and donees. In other words, a complete and comprehensive database on grants on a continuing basis within a consistent framework is a prerequisite for studies on grants transactions. In fact, the same position is true for any discipline, because without such adequate and proper statistical databases quantifying and summarizing the transactions, it will be difficult, if not impossible to conduct any analytical studies.

In the field of economics, there are two distinct categories, namely, (a) Exchange Economy covering quid pro quo transactions; (b) Grants Economy covering grant

---

[5] *Kenneth E. Boulding, Martin Pfaff, Janos Horvath, "Grants Economics: A Simple Introduction", American Economist, Spring 1972, p.20.*

[6] *Janos Horvath, "Rural America and the Grants Economy", American Journal of Agricultural Economics, December 1971, 53 (5), p. 740; also see Janos Horvath, "On the Evaluation of International Grants Policy", Public Finance, 1971, 26(2), p. 381.*

transactions[7]. (See Appendix 1) The statistical database for the Exchange Economy is adequately covered by the "System of National Accounts" which has already been fully developed to provide, among other things, the conceptual framework, sectoral classification, and methods of examining statistical information for economic analysis. However, a similar system to analyze the Grants Economy has not yet been developed and this paper deals with that gap.

Let me elaborate this point. The System of National Accounts (SNA for short) is built around the central concept of Gross Domestic Product (GDP) and deals mainly with the production, investment, incomes accruing to the factors of production, and consumption. In other words, it provides a basic statistical picture of the key economic processes of the exchange economy and measures the economic activity associated with the production and disposition of goods and services in final markets. However, it also contains "transfer" transactions between sectors as a subsidiary item for the measurement of total income and expenditure and to derive sectoral savings of the economy. As the SNA's main area of attention is the exchange economy with emphasis on the quid pro quo transactions, the SNA "transfers" include all other non-quid pro quo transactions including payments out of trust funds, etc. Consequently, the SNA "transfers" do not necessarily conform to the "grants" concept of Grants Economics and they cannot be equated to grants. In view of this, the transfer transactions of the SNA

---

[7]   *Kenneth E. Boulding, "The Grants Economy", Presidential Address delivered to the Michigan Economics Association, Grand Vally State College, Michigan, March 22, 1968 at the Annual Meeting of the Michigan Academy of Science, Arts, and Letters , Michigan Academician, Vol. 1, No. 1, Winter 1969, Ann Arbor, Michigan, P.3.*

would require rigorous treatment in a separate system containing conceptual and statistical framework similar to that of the SNA to focus proper attention exclusively on grant transactions. Such a system would facilitate an analysis of grants in terms of the flows as well as the direction of those flows from one sector to the other. It is an essential system which is urgently needed to know more about the income redistribution transactions and their impact on the economy[8]. To fill this gap, "A System of Grant Accounts" (SGA for short) with its supporting tables is presented here exclusively for the study and analysis of grants database.

II *Advantages of the System of Grant Accounts (SGA)*

Let us then see some of the advantages of the System of Grant Accounts. The SGA provides a coherent framework for recording and presenting the grant flows. 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 for inter-country comparative studies can be obtained to draw meaningful conclusions on grant transactions and to study the effect of government grant giving policies.

It should be recalled here that the System of National Accounts (SNA) contains, among other things, Sector Accounts and other related aggregates such as transfer payments and receipts from one sector to the other. These "transfers" do not

---

[8] *For a more detailed discussion, see "The Need For A System of Grant Accounts" by P.S.K. Murty presented at the 19th Annual Meetings of the Eastern Economic Association at Washington, DC, March 19-21, 1993.*
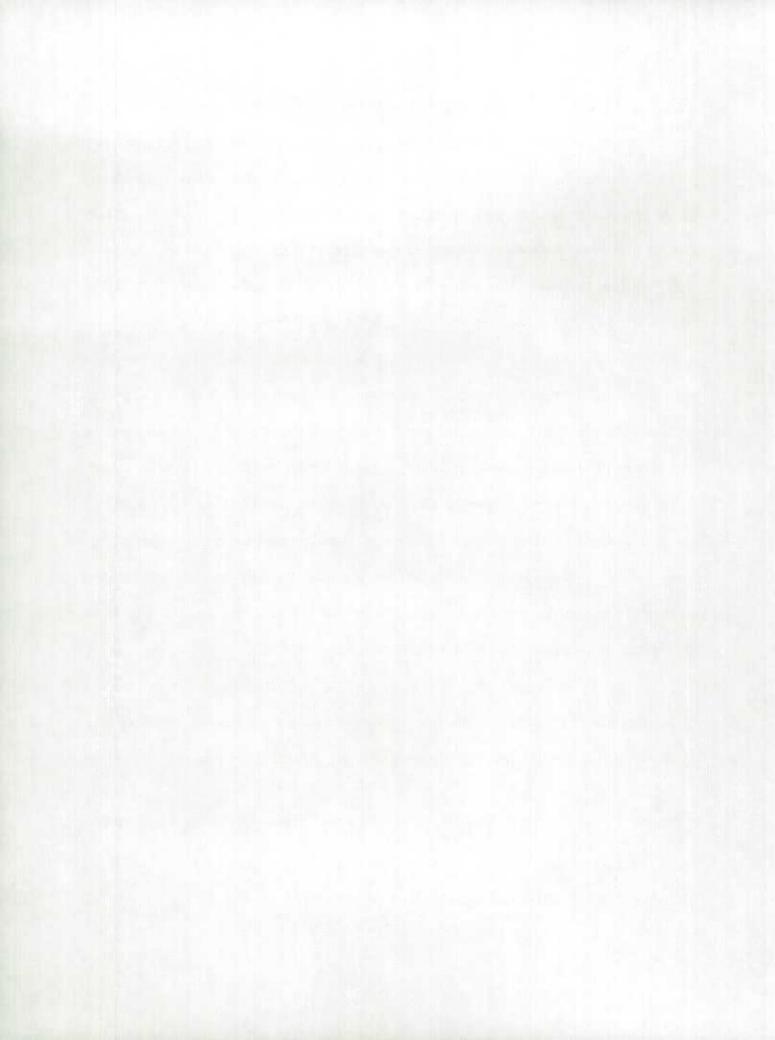
necessarily conform to the grants concept as defined in the Grants Economics and therefore they cannot be equated to grants. For example, government sector transfer payments contain transactions such as pensions to the retired employees and payments made to other institutions to deliver services on behalf of the government. This type of grouping meets the SNA criteria for classification, but it does not meet the "grants" definition. Consequently, the SNA "transfers" which include "non-grants" cannot be used as synonymous to grants and the SNA cannot be used as a source for grants data. If, however, in the absence of pure grants data, SNA "transfers" are used as "grants" for policy evaluation, the analysis resulting from such an exercise would only give misleading results and any policy decisions based on such misleading results would be unrealistic. This situation would be remedied if the proposed System of Grant Accounts (SGA) is implemented for the development of statistical information on grants. Such a system would be complementary and supplementary to the SNA.

As mentioned by the late professor Boulding, the distinction between a grant and an exchange is subject to some ambiguity[9]. If the SGA with its own conceptual and classification framework is in-place for grant transactions, any problems and ambiguities in the classification of individual transactions involving transfer of funds can be better evaluated and dealt with more effectively. The introduction of the new database on grants in the SGA would give a complete picture of the total economy as

---

[9]   *Kenneth E. Boulding, "The Grants Economy", Presidential Address delivered to the Michigan Economics Association, Grand Vally State College, Michigan, March 22, 1968 at the Annual Meeting of the Michigan Academy of Science, Arts, and Letters, Michigan Academician, Vol. 1, No. 1, Winter 1969, op. cit., P.3.*
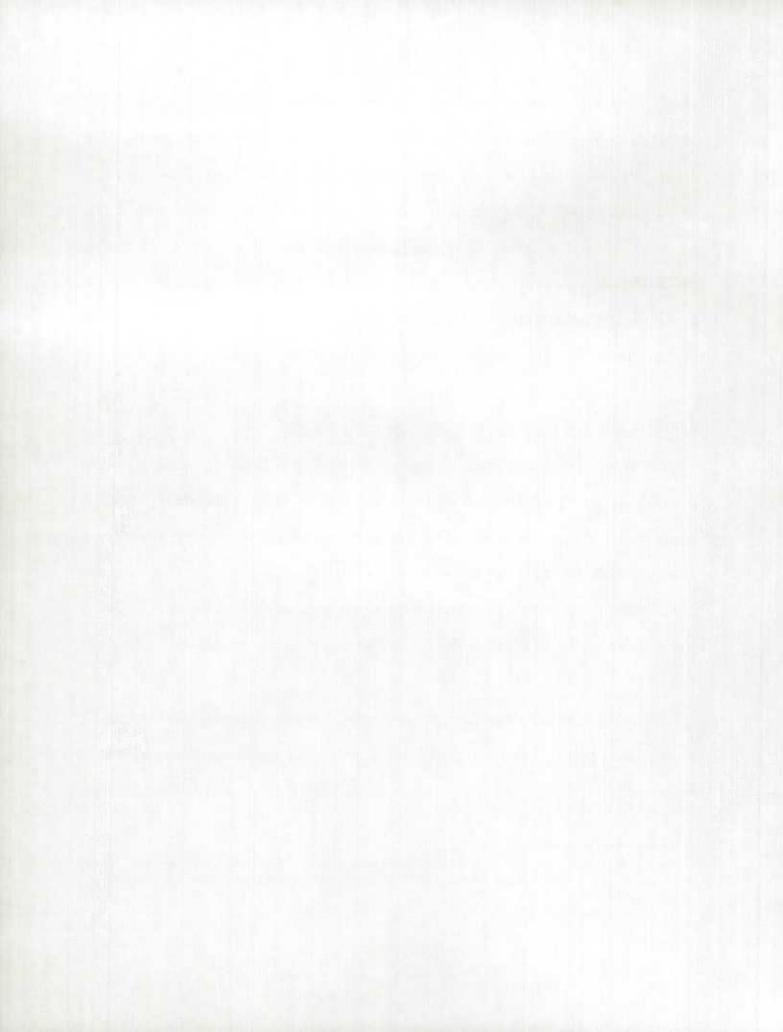
the existing SNA measures the exchange transactions on the one hand while the new SGA would measure the grant transactions on the other hand. Thus, the total economy which consists of two parts, namely (a) exchange economy and (b) grants economy[10] (Appendix 1) will be adequately covered and measured in these two systems (i.e. SNA and SGA) for analysis and policy decisions. Both systems are essential for the presentation of important macro-economic statistics, because, while the SNA deals with the exchange economy i.e. production and disposition of goods and services and reflects the quid pro quo transactions, the SGA deals with the grant economy and reflects only grant transactions.

As the SGA provides a comprehensive system covering gross and net flows of the grants economy into consistent statistical series at the national and international levels, it facilitates the data availability within a consistent and integrated framework particularly at a time when the grants economy is growing and becoming more important. Also, the grant transactions would be more transparent by sectors of donors and donees and administrative accountability would be facilitated as the essential information would be available not only to answer crucial questions on income redistribution programs, but also to monitor budgets and costs associated with grants.

---

[10] *Ibid*, P.3.

Over the last several years, grants, particularly those of the public sector, have been gaining importance. They have been increasing in relation to exchange economy. For example, in Canada, the public grant outflow grew faster than the expenditure on goods and services from 1961 to 1991. In 1961, the total government spending on both goods and services and grants combined was about $10 billion[11]. Of this amount, the public grants were about $2 billion and constituted 20% of the total spending. By 1991, the total government spending rose to $215 billion with a 21-fold increase. On the other hand, the public grants rose to about $58 billion with a 29-fold increase and constituted 27% of the total spending. Thus, the public grants as a proportion of total government spending increased from 20% in 1961 to about 27% in 1991 with a corresponding decline in the expenditure on goods and services from 80% in 1961 to 73% in 1991. (Appendices 2 and 3) In terms of the Gross Domestic Product at market prices, the Canadian public grants rose from about 5% in 1961 to about 9% by 1991. (Appendices 4 and 5) It is possible that other countries might have the same experience. In view of the growing trend and magnitude of the grants economy, there is an urgent need to develop an exclusive grants database with its special analytical framework to answer crucial questions on the grant flows and the net beneficiaries. The proposed System of Grant Accounts, if implemented, meets this urgent need as it provides the essential database along with a special analytical framework to answer these and other questions on the grant flows. Further improvements to the system

---

[11] *Murty, P.S.K., "The Need for a System of Grants Accounts", Technical Series no. 56, Input-Output Division, Statistics Canada, Ottawa, Canada, 1993, p. 40.*

involving disaggregation of items or extension to items could be made later depending on the analytical requirements.

III *General Concepts of the System of Grant Accounts (SGA)*

This section contains five parts. The first part deals with concepts while the second part contains a new analytical approach of net flows. The third part describes the use of a four sector model and six data dimensions. While the fourth part contains general classification procedures for some special situations, the fifth part deals with sectoral classification of grants data.

A. *Concepts*

1. *Grant*

Grant, by definition, is "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"[12].

Following this definition of grant, if A gives something exchangeable to B and if B gives nothing exchangeable to A, the transaction is a grant. However, the transactions have to be examined further to exclude those which may look like grants on the surface, but may not meet the criteria of grants. The following situations are examples of some of those transactions.

---

[12] *Kenneth E. Boulding, Martin Pfaff, Janos Horvath, op. cit, p. 20.*

(i) *If A gives <u>something</u> exchangeable to B and if B gives <u>nothing</u> exchangeable to A, <u>because B is simply getting back his own resources from A</u>, the transaction does not fall in the grant definition. As B is getting back his own resources from A, it is a <u>Trust Fund repayment</u> type transaction.*

(ii) *If, however, <u>B is supposed to deliver some services to C on behalf of A</u>, then it is a quid pro quo type transaction of an indirect nature. In other words, B is not delivering services to A who gave something exchangeable; instead, <u>B is producing services and delivering to C on behalf of A</u>. This transaction falls in the exchange economy, but not the grant economy.*

Both the above situations are outside the scope of grants for measurement in the System of Grant Accounts. As the transactions do not meet the grant concept, they are not measured in the SGA.

In the System of National Accounts, distinct names are given to the types of government transfer payments made to the business sector in order to distinguish them from those given to other sectors of the economy. The government transfers to the Business Sector on current account are called "subsidies" while on capital account are called "capital assistance". The transfers to other sectors are simply called "transfer payments" whether they

9

are for current account or capital account. For the purpose of the proposed System of Grant Accounts, however, all such transfers to the Business Sector and to other sectors are considered as "grants" without making any such distinction between the current and capital accounts.

2. Sectors

The classification of the four sectors for the SGA is the same as the one used in the System of National Accounts. The SNA divides the economy into four major transactors or sectors. They are:

> *(i)   Government Sector;*
>
> *(ii) Business Sector;*
>
> *(iii) Personal Sector;*
>
> *and   (iv) Non-Resident Sector.*

These four SNA sectors are essentially quite different groups of transactors, but are homogeneous within themselves in their motivation and behaviour.

(i)   Government Sector

The Government Sector represents all levels of government, namely, federal, provincial, and local. It includes government departments, agencies, commissions, and boards which operate essentially on a non-commercial basis and which carry out various functions delegated to them by public authorities.

In Canada, it also includes hospitals which are under the financial and operational control of provincial government. The Government Sector does not include government business enterprises which form a part of the Business Sector, since they operate on the same principles as those of private enterprises. This "Government Sector" is also called "Public Sector" as it mainly deals with the operations of the public authorities.

(ii) Personal Sector

The Personal Sector includes households, individuals and non-profit institutions. Ideally, unincorporated business establishments such as those operated by self-employed persons (i.e. individual farmers, independent retailers, professional practitioners, and other proprietors who operate their own businesses) should be combined with the Business Sector. However, practical difficulties exist in separating the data of the unincorporated business between the business account and the personal account. In such a case, the data of persons and unincorporated business can be combined together as is presently done in the Sector Accounts of the Canadian System of National Accounts. Then, Persons and Unincorporated Business constitute the Personal Sector for both SNA and SGA. If, however, the SNA separates the unincorporated business establishments at a later date, the same classification should be used for the SGA also.

(iii) *Business Sector*

Ideally, the Business Sector should include all business establishments along with government business enterprises whether unincorporated or incorporated. However, practical difficulties of obtaining separate data for unincorporated business category of establishments may not permit such a pure Business Sector for Sector Accounts. In such a case, the unincorporated business establishments can be combined with the Personal Sector as is presently done in the Sector Accounts of the Canadian SNA. Then, the Sector Accounts of the Business Sector cover only incorporated business establishments for both SNA and SGA. Here again, if the SNA separates the unincorporated business establishments from the Personal Sector and includes them in the Business Sector, the same classification should be used for the SGA also.

(iv) *Non-Resident Sector*

The Non-Resident Sector of the economy groups together the transactions that take place between the country concerned and the rest-of-the-world. This sector simply meets the need to group all transactions with the rest-of-the-world in one category to facilitate the analysis of economic inter-relationships between the domestic economy and the rest-of the world . It includes all the other three sectors, namely, government, business, and persons as one single group situated outside the domestic economy of the country concerned.

12

B. New Analytical Approach of Net Flows

The System of Grant Accounts contains a new analytical approach of net flows to analyze the grants economy.

Traditionally, grants are analyzed using gross flows. As the traditional approach will only deal with one side of the transaction, the System of Grant Accounts uses 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 (i.e. receiving 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 less GR

where

GO = Grant Originating,

GP = Grant Payments, and

GR = Grant Receipts.

Based on this formula, the SGA contains three elements showing grant flows, namely, Grant Payments, Grant Receipts, and Grant Originating (GO). A positive GO indicates that the Grant Originating is in the donor sector (i.e. paying sector) while a negative GO indicates that the Grant Originating is not

in the donee sector, but elsewhere in the <u>donor sector or sectors</u>. The SGA
shows the absolute levels of grants including the direction of the gross grant
flows as well as net flows. It is the <u>net</u> level of Grant Originating (GO) that
is crucial in the analysis as it indicates the sectoral role and behaviour in the
macro-economic analysis. For example, if the <u>net</u> Grant Originating in the
Business Sector is at a negative level, it indicates that the Business Sector
received more grants than it paid out and that it is the <u>net</u> beneficiary of the
grants economy. If, however, the <u>net</u> Grant Originating is at a positive level,
it indicates that the sector paid out more grants than it received and that it is
playing the role of a donor in the income redistribution activity of the grants
economy. If such <u>net</u> Grant Originating data of all sectors of the economy are
analyzed, the relative roles played by the sectors would be more revealing in
the new approach than in the traditional analysis of the gross grant flows.

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 grants. To illustrate this point, let us take a
simple example concerning public grants. If the public grant (i.e. family and
youth allowances) 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),

14

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 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 (i.e. family and youth allowances) of $100, 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 grant outflow. There may in fact be a net grant inflow. Let us take another simple example in which the public grant (i.e. family and youth allowances) to the Personal Sector is $60 while the personal grant (i.e. income taxes) to the Public Sector is $100. Based on

these transactions, there is no <u>net</u> grant outflow from the Public Sector; but, there is only a <u>net</u> inflow of $40 from the Personal Sector to the Public Sector. In this case, the Grant Originating is from the Personal Sector to the Public 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 gross inflows should be studied along with the <u>net</u> flows as outlined in this new analytical approach.

C. *Four Sector Model and Six Data Dimensions*

The SGA provides a conceptual and classification framework to capture the grant flows at the gross and net levels. It uses 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. The advantage of using the SNA's four sector model is two-fold. First, all the grant transactions can be summarized into the same four main categories of transactors or sectors as those of the SNA for consistency between the two systems. Second, the intra-sectoral grant transactions need not be measured as the payments and receipts offset each other within the same sector. It is only the grant transactions crossing sector boundaries that will be measured for the SGA in the same way as the SNA's measurement of exchange transactions. The SGA also shows the database for the

16

three elements of the GO formula, namely, GP, GR, and GO for each of the four sectors. Thus, it presents the grant transactions for the inter-sectoral net flows in the following six dimensions using the new analytical approach and ignores the intra-sectoral flows.

(i) Grants between the Government Sector and the Business Sector;

(ii) Grants between the Government Sector and the Personal Sector;

(iii) Grants between the Government Sector and the Non-Resident Sector;

(iv) Grants between the Business Sector and the Personal Sector;

(v) Grants between the Business Sector and the Non-Resident Sector; and

(vi) Grants between the Personal Sector and the Non-Resident Sector.

It should be noted that only actual grant transactions are measured in the above six dimensions. Discounts and premiums which are usually reflected in the market prices are not counted as grants, because they are, by definition, parts of price fixing mechanism of the market and are reflected in the market prices measured in the exchange economy of the SNA. If, for example, a buyer in a market transaction gets a 10% discount on the normal list price, the seller is not giving a grant of 10% to the buyer. Instead, the market price for that buyer is 10% lower than the list price. Based on this principle, the market prices could be different from one buyer to the other depending on the circumstances. It should not be assumed that there is only one market price in the economy i.e. list price of the manufacturer or retailer. Under normal circumstances, both the seller and the

buyer seek prices suitable to them for the transactions and those prices at which the transactions are finalized become the market prices in the measurement of exchange economy. Also, barter transactions of goods and services where prices are not explicit are a part of exchange economy and will be reflected in the SNA items based on the market prices of the relevant commodities. As such, they are outside the scope of the SGA. For example, if the Business Sector gives free food and clothing to its employees, the value of those goods will be measured as wages-in-kind for services rendered and reflected in the labour income and consumer expenditure for the GDP. If, for example, those goods are shipped abroad in exchange for some other goods from non-residents, they will be measured and reflected in exports and imports respectively for the GDP measurement. In other words, the Commodity Balancing Method of the SNA's Input-Output Accounts will capture the transactions of the commodity flows of barter transactions in order to account for the total supply of the commodities concerned.

If, however, there is no barter in such commodity flows, and if the transaction is only a one way transfer flowing from one side only without any exchange, then it will fall in the grant definitions and will have to be measured and reflected in the SGA.

It should be recognized, however, that the intra-sectoral transactions will cancel out as the payments will equal the receipts within each sector. It is only

the transactions that cross the sectoral boundaries that will be captured in the database of the six dimensions of the SGA. If, however, sectors are further disaggregated into sub-sectors, the principle of capturing transactions will have to be changed to measure the data that cross the sub-sectoral boundaries and the six dimensions mentioned earlier will have to be expanded to capture those sub-sectoral transactions. Here again, the intra-subsectoral transactions will be ignored.

D. *General Classification Procedures*

In order to present the several millions of transactions that take place in the economy in a manageable structure, the transactions are classified into those belonging to (a) exchange economy and (b) grant economy. The general principles that are applicable here are the following:

(i)   If a particular transaction contains the element of quid pro quo, it is classified to the exchange economy and it will not be measured in the grant economy.

(ii) If, however, the transaction has no element of quid pro quo and if it falls in the definition of a grant as defined in the Grants Economics, it has to be measured in the grant economy.

(iii) The SGA will record only transactions that actually take place in the economy. No imputation should be made based on value judgements or assumptions. In other words, it is only the actual and direct grant

transactions that will be measured and reflected in the SGA in the time period (i.e. month or quarter or year) they happen in the economy. For example, if A is supposed to give a grant of $100, but did not give to B, there is no grant transaction. On the other hand, if B is supposed to give a grant of $150 to A, but gave only $50 to A after offsetting the amount which A should have given to B in the first place, there was only one transaction, namely, B gave a grant of $50 to A. In such a case, the level of grant that was observed should not be split into two assumed grant flows -- one from A to B for $100 and another from B to A of $150. This manner of dealing with actual and direct transactions is similar to the general procedures used to record exchange transactions in the SNA and will not create any problems to observe the transactions and to obtain the necessary statistical information for the observed transactions.

In addition to this general principle of transaction approach, the SGA treatment of some special situations is discussed below.

1. Loans

In the case of loans, the lender gives funds and the borrower is supposed to repay them back to the lender usually with some interest. Both the transactions of giving and repaying of loans have neither quid pro quo nor grant elements.

If, however, the loans become bad and get written off due to the inability of the borrower to repay, the transactions fall in the definition of grants and the lender becomes the donor while the borrower becomes the donee.

Loans can also be given out at lower interest rates than those prevailing in the market. The difference between the market rate and the lower rate is not a grant because the lower rate has to be deemed to be the market rate in such a transaction. This type of transaction is similar to sales discounts given by vendors to their customers reflecting lower prices than those listed as selling market prices. In this context, interest-free loans have to be taken as loans with "O" rate of interest and there is no grant involved in such a case either.

2. Deposits

Deposits in bank accounts or trust funds for safe keeping and withdrawal later by the depositors have neither quid pro quo nor grants elements. If, however, the deposits are not repaid due to causes such as bankruptcies, they fall into the definition of grants.

3. Interest Received by Government Sector

The "interest" received by the Government Sector has to be examined taking into account the transactions generating that interest income. As the general government is not in the business of lending money for interest like the financial

institutions, and as the interest is generated on delayed payments from other sectors, the amount of interest should be considered as delayed payment at a higher rate for the main transaction. In other words, when payment is delayed, the rate at which the payment is due increases; otherwise both the level of payment and the rate at which it is due remain the same. In such a case, the payment for the main transaction differs from one point of time to the other. The interest earned by the Government Sector on delayed payments should be re-allocated back to the original transactions concerned and the relevant items adjusted upwards to the extent of interest earned for delayed settlement of accounts.

However, the interest earned from financial institutions should be treated as interest income because it is related to the deposits of funds kept in the financial institutions. This is a legitimate transaction that earns interest on the deposits.

4. *Interest Paid by Government Sector*

Interest on the public debt is treated as a transfer payment in the SNA[13], because national income should not vary simply because of changes in techniques of financing government operations either from taxation or borrowing. This is consistent with Boulding's views in his article on "Puzzles Over Distribution"[14].

---

[13] *National Income and Expenditure Accounts, Volume 3, A Guide to the National Income and Expenditure Accounts, Definitions-Concepts-Sources-Methods, Statistics Canada, Catalogue 13-549E Occasional, Ottawa, September 1975, p. 104.*

[14] *Kenneth E. Boulding, "Puzzles Over Distribution", Challenge, November - December, 1985, P.9.*

22

Here, Boulding writes: "The passive owner of debt... receives an income by virtue of pure ownership without doing anything very much, and the interest then has something of the characteristics of a grant". But, of course, the SNA treatment of interest as a grant is limited only to the public debt interest.

The current treatment of interest on the public debt in the SNA as a transfer or a grant deserves to be re-evaluated because this flow can be considered exchange of services from borrowers to lenders[15]. This controversial subject was discussed at length in the literature but no definite conclusion is available at this stage[16]. However, there are some ideas expressed in the proposals to revise the present United Nations System of National Accounts to provide alternatives to the existing treatment. One such proposal is to assume "that interest flows consist of two parts, including a service charge and a net interest flow"[17]. While the service charge in this case is a quid pro quo transaction, the net interest flow becomes a grant. If this proposal is accepted in principle, the statistics for the service and grant components in the interest <u>would have to be developed by statistical agencies and articulated in both the SNA and SGA</u>.

---

[15] *Sunga Preetom S., "The Treatment Of Interest And Net Rents In The National Accounts Framework," International Association For Research in Income and Wealth, <u>The Review of Income and Wealth</u>, March 1967.*

[16] *For example, see Goldberg S.A., "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)*

[17] *See 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)*

5. *Insurance*

Insurance is of two kinds: (a) fire and casualty; and (b) life. In the case of fire and casualty insurance, the general principle used in the SNA is to measure the cost of service by taking the difference between the premiums received by the insurers and claims paid to the insured and to route the net premiums as a cost of producing the insurance service. In the case of life insurance, however, additions to the actuarial reserves are also deducted from the premiums besides the claims to calculate the cost of producing the life insurance services. In other words, the funds are collected from the participants and pooled together to make disbursements out of those funds to the participating sectors if and when the set conditions are met. It should be remembered here that the measurement is at the sectoral level but not at the individual participant level. In these calculations of SNA measurement, both the inflows and outflows (i.e. premiums and claims) are taken into account and they will be outside the scope of the SGA.

6. *Lotteries, Horse Races, Bingo Games and the Like*

The participants of lotteries, horse races, bingo games and the like pay a certain amount which entitles them to enter the contests. Just like the insurance business, the funds are collected from the participants and disbursed as prizes to the winners if and when the set conditions are met. Here again, the SNA takes the net amount after deducting the disbursements from the receipts and routes the net as the cost of service. In other words, both the gross inflows of ticket sales and

24

outflows of claims are ignored in the articulation of transactions; instead, the <u>net</u> inflow of funds from the sectors concerned is taken as the cost of service. Therefore, the outflows of prizes are <u>not</u> grants for the SGA.

7. *<u>Frequent Traveller Awards and the Like</u>*

Airlines and hotels give frequent traveller awards to their customers based on the points earned during their patronage. Such awards are <u>not</u> grants as the prices collected from the customers during their patronage include the cost of those awards. These awards would then fall in the category of price discounts to the various classes of customers and have to be treated as such, but <u>not</u> grants.

Similar programs of accumulating points can exist at retail stores and they all have to be treated as programs of price discounts, but <u>not</u> grants.

8. *<u>Political Contributions</u>*

Political contributions are given by business establishments and persons to political parties. As the political parties are associations of individuals for non-profit purposes, they are regarded as non-profit institutions and classified to the Personal Sector in the SNA. In the context of the classification, the contributions made by the persons have to be ignored as they constitute intra-sectoral transfers. However, the contributions from the business establishments cross the sectoral

boundary (i.e. Business Sector) and they have to be treated as grants from the
Business Sector to the Personal Sector.

9. *Cash Versus Accrual*

The grant transactions measured in the SGA should be those that are on a
cash basis. The transaction occurs when the ownership of exchangeable resources
passes from the donor to the donee. These principles will be consistent with the
occurrence of granting, because it is only at the time of actual giving and receiving
that the net worth of the donee increases with a corresponding decline in the net
worth of the donor.

10. *Exemptions of Indirect Taxes*

It is quite common for governments to exempt selected commodities from
indirect taxes such as sales taxes. This sort of exemption implies that the market
price for such exempted commodity will be lower than the taxed commodities to
the extent of the exemption and there is no grant involved here.

It is also common for governments to exempt selected transactors such as
diplomats from paying sales taxes. In such a case, the market prices of
commodities sold to diplomats will be lower to the extent of such exemption and
there is no grant involved here also.

There could be other instances where governments reduce the property taxes payable by a certain class of transactors such as specific industries or establishments of specific industries. Here again, there is no grant involved but rather the market prices of commodities produced by those transactors will be lower as a result of lower property taxes, namely, lower input costs.

11. *Overpayment of Taxes*

Overpayment of taxes by taxpayers is quite common. In such cases, the government on receipt of necessary documentation and verification, gives back such overpaid amounts to the taxpayers concerned by way of refunds. These refunds do not fall under the definition of grants as the taxpayers are still the legal owners of the overpayment and the government is simply giving back the funds to the respective owners.

12. *Tax Credits*

Sometimes, the government may authorize taxpayers to reduce the taxes owed by a certain amount for a special credit (such as investment credit, child credit etc.) and remit the balance. The circumstances of each of these credits would have to be examined in detail before classifying them as grants.

The above is not an exhaustive list of all special considerations and there may be other cases requiring further research before a proper classification can be

made for the SGA. It should be remembered, however, that each case has to be reviewed based on its merits keeping in mind the guidelines regarding the concepts involved in the measurement of grants.

E. Sectoral Classification of Grants Data

    1. Grants to Government Sector from Other Sectors

        According to the grant concept, all collections of direct taxes such as income taxes, succession duties, estate taxes, hospital and medical insurance premiums, and withholding taxes which are transfers for the SNA, are also grants for the SGA which flow to the Government Sector from other sectors.

        It should be noted that only direct taxes such as income taxes etc. are grants, but not indirect taxes as they have an element of quid pro quo. Let me elaborate.

        There are two types of indirect taxes: commodity type and non-commodity type. The commodity type indirect taxes such as sales taxes are embodied in the market prices of commodities -- goods and services -- which have to be paid by consumers in exchange for the specific goods and services. They are a part of the pricing mechanism. As the consumer pays the commodity indirect taxes and receives back the goods and services, there is a clear quid pro quo visible in the transactions concerned. However, in the case of non-commodity type

indirect taxes, such as property taxes and business licences, there is an invisible quid pro quo, since these taxes are paid in exchange for some special privileges and benefits. For example, the property tax payers get <u>continuing title to their property</u> which entitles them to several municipal services, such as snow removal, and to that extent their net worth increases; similarly the payers of licence fees (e.g. business establishments) obtain <u>a right to carry on their business activities</u> and their net worth increases to that extent. In this context, the indirect taxes have an element of quid pro quo but they have <u>no element of grants</u>. Also, in the macro-economic analysis based on the System of National Accounts (SNA), property owners who pay property taxes are treated as business establishments -- whether incorporated or unincorporated -- because they generate rental income which is routed to themselves. For example, in the Input-Output Accounts of the Canadian SNA, the imputed rent of homeowners is routed as output consumed by themselves while the property taxes, among others, are treated as inputs in the cost of operating their homes, i.e. their unincorporated business. Thus, the indirect taxes get specifically incorporated in the input structure of the output and also in the market prices of goods and services produced in the economy.

Indirect taxes and subsidies are sometimes misunderstood as offsetting transactions of the same category. This is not so because they are distinct transactions of different categories. While indirect taxes tend to get added to

the cost of goods and services, subsidies tend to get deducted from the cost to arrive at lower market prices. The only common characteristic in these two different types of transactions is that they both affect the market prices but in different directions -- the indirect taxes are an <u>addition</u> to while the subsidies are a <u>deduction from</u> market prices. Moreover, indirect taxes being a part of market prices have the element of quid pro quo while the subsidies do not have such quid pro quo as the grant element is inherent in them. In view of these reasons, indirect taxes and subsidies should be construed as <u>distinct transactions of different categories</u> and they should not be mixed up as one and the same category.

2. <u>*Government Grants to the Personal Sector*</u>

Government grants to the Personal Sector include such payments as family and youth allowances, old age security payments, scholarships and fellowships, payments to disabled persons, among others. The SNA government transfer payments to the personal sector contain a mixture of transactions such as "trust fund" type and "quid pro quo" type and they have to be filtered through the grant concept to derive pure grants. (See Appendix 6 for details in the case of the Canadian experience). If it is desired to include unincorporated business in the Personal Sector, the government grants to the personal sector should also include subsidies and capital assistance to unincorporated business. However, as a clear disaggregation of subsidy data between incorporated and

unincorporated business does not generally exist in the official statistics, estimates may have to be made for the required split between incorporated and unincorporated businesses[18] and included in the sectoral data to maintain consistency between SNA and SGA.

Besides giving direct grants to the Personal Sector, the government may also give credits and rebates against income taxes payable by the Personal Sector. In these transactions the government is, instead of increasing the grant payment (GP) to the Personal Sector, reducing the grant receipt (GR) from the Personal Sector. There are therefore, no direct grant flows from the government through such rebates and offsets per se. It is only counter-flows that will be reduced to the extent of those rebates and offsets. In such cases, the Grant Originating (GO) from the government sector increases and the grant element will be reflected in the rise of the GO, other things being equal, as discussed earlier. It can be argued that the credits and rebates have to be measured as grants, and that the income taxes against which they are offset have to be grossed-up to measure the proper level of grant inflow. It has to be noted, however, that in such cases where these credits and rebates play a role in determining the grant flows, it will be impractical and impossible to gross-up all the numerous transactions that take place in the economy.

---

[18] *Generally speaking, subsidies for agriculture and housing assistance are classified to the unincorporated business for the sectoral classification as they mostly constitute payments to farmers and homeowners respectively.*
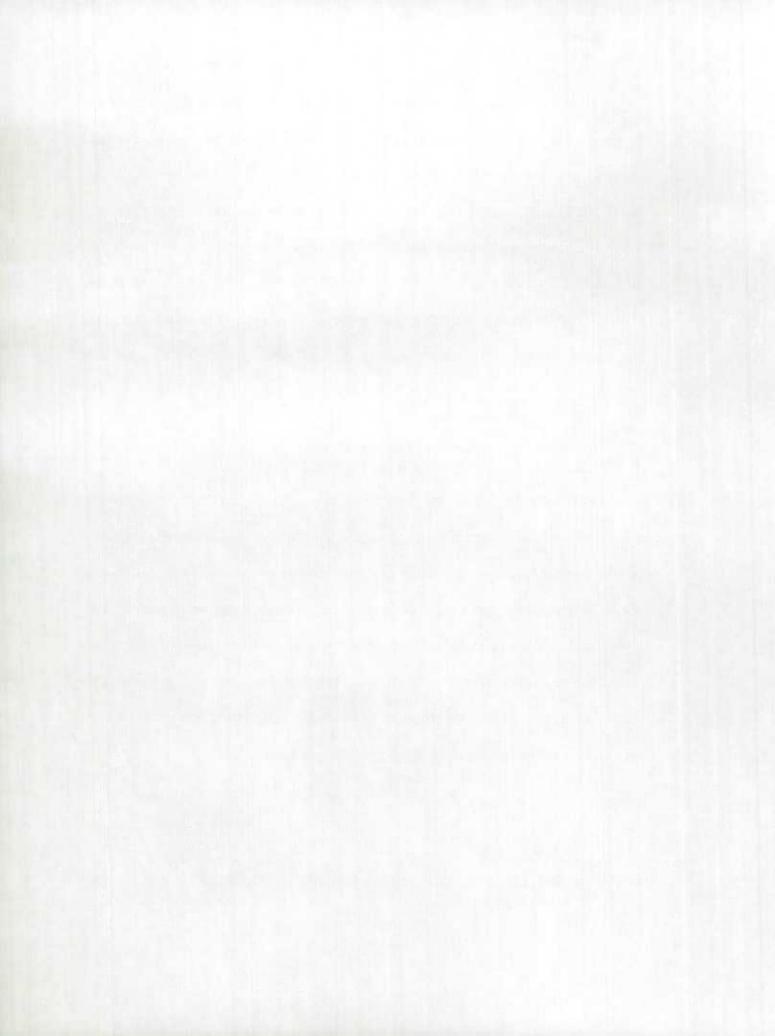
Moreover, attempts to measure transactions which are neither explicit nor direct such as credits and rebates only to the extent of observed and known items would result in inconsistent and incomplete database for both SNA and SGA. Although the argument is valid in theory, it is not possible to implement it for all the transactions in the economy. The practical solution to such a situation is to measure only direct transactions the way they happen in the economy rather than trying to gross-up the level of each transaction. Such a solution would also maintain consistency in the databases of both SNA and SGA.

3. *Government Grants to the Business Sector*

Government grants to the business sector include all transfer payments whether subsidies or capital assistance. By definition, subsidies are grants to business establishments given by the government on "current account"[19] and there is no direct exchange of goods or services between business and government. As a split between incorporated and unincorporated businesses for subsidies is generally not available, estimates may have to be made in this regard to separate those relating to the unincorporated business for consistent sectoral classification of data for both SNA and SGA.

---

[19] *United Nations, National Accounts Statistics: Main Aggregates and detailed tables 1986, New York 1986, p. XVI.*

The Government Sector can give subsidies to the Business Sector for various purposes such as the following to stabilize market prices for some goods and services:

    (i)   to develop new technologies;

    (ii) to conduct research;

    (iii) to hire new entrants into the workforce for job training;

and (iv) to deliver a good or service that would not otherwise be produced by the Business Sector due to its cost and subsequent high market price, (e.g. rail transportation).

In all these purposes, there is an element of cost-sharing by the government to the extent of the amount given which is called the subsidy.

This difference in terminology used in the SNA distinguishes the grants to businesses from those given to other sectors of the economy. While the grants to businesses are called "subsidies" and "capital assistance", the grants to other sectors are called "transfer payments".

Under normal circumstances, subsidy transactions within the SNA conceptual framework are for current account only and arise as follows:

(a) *Government Sector makes direct <u>payments</u> to the Business Sector to reduce the current cost of production and shows them in the Public Accounts as "transfer payments".*
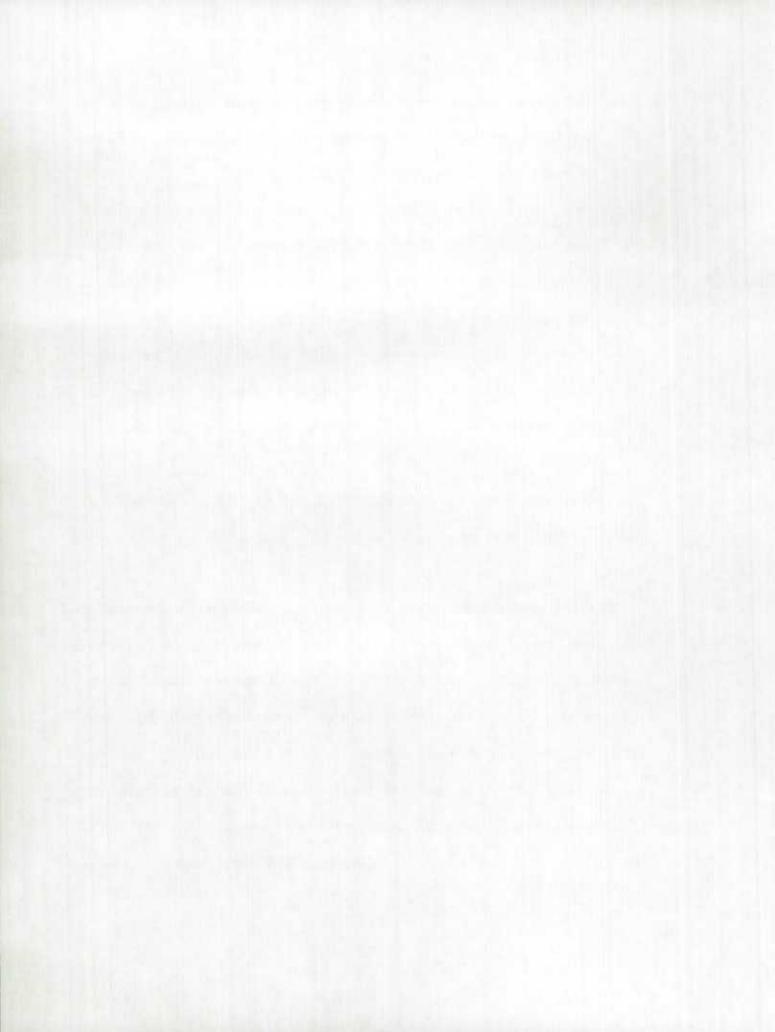
(b) *The Business Sector <u>receives</u> the payments and shows in its current account as "income" along with its sales revenues. The "government transfer payments" are thus reflected in the derivation of the business "operating profits" measured for the SNA.*

(c) *As the "government transfer payments" are not a part of production (but a part of grant), the SNA includes them in "subsidies" and removes them from the GDP via the negative entry of "subsidies".*

This is what happens in the measurement of production of any country in terms of National Accounts.

In addition to subsidies on current account transactions, the government also gives capital assistance to business establishments. Such capital assistance to business is intended to stimulate the purchase of new machinery, equipment and new construction. The business sector receives the funds and incurs a capital outlay for those purposes, and here again goods or services are not exchanged between business and the government. However, the net worth of the government decreases with a corresponding increase in the net worth of the business sector. The increase in the net worth of the business sector is

synonymous with a profit. In this context, the capital assistance is also a form of subsidy aimed at capital account transactions.

Besides subsidies and capital assistance, the government can also transfer funds to the credit of the business establishments to cover losses usually at the end of accounting periods. Here again, the net worth of the Business Sector increases while that of the Government Sector decreases and such transactions would also be considered as grants in the SGA. The increase in the net worth of the Business Sector is synonymous to a profit and the operating profits of the Business Sector should be adjusted upward for the GDP measurement, if not already done by the establishments concerned.

The government can assist the business establishments in many other ways. They can give "outright grants" which are called subsidies as described above. They can also build access roads from highways to the actual locations of the business establishments. Such an activity is not a grant as no direct payment was made to the business. It is a part of the exchange economy where the government purchases goods and services to build the roads. Even though the access roads are for the sole benefit of the business establishments concerned, the expenditure of the government in the construction of the access roads is not a grant to the business establishments, but a direct expenditure of the Government Sector on goods and services. Similarly, the government might
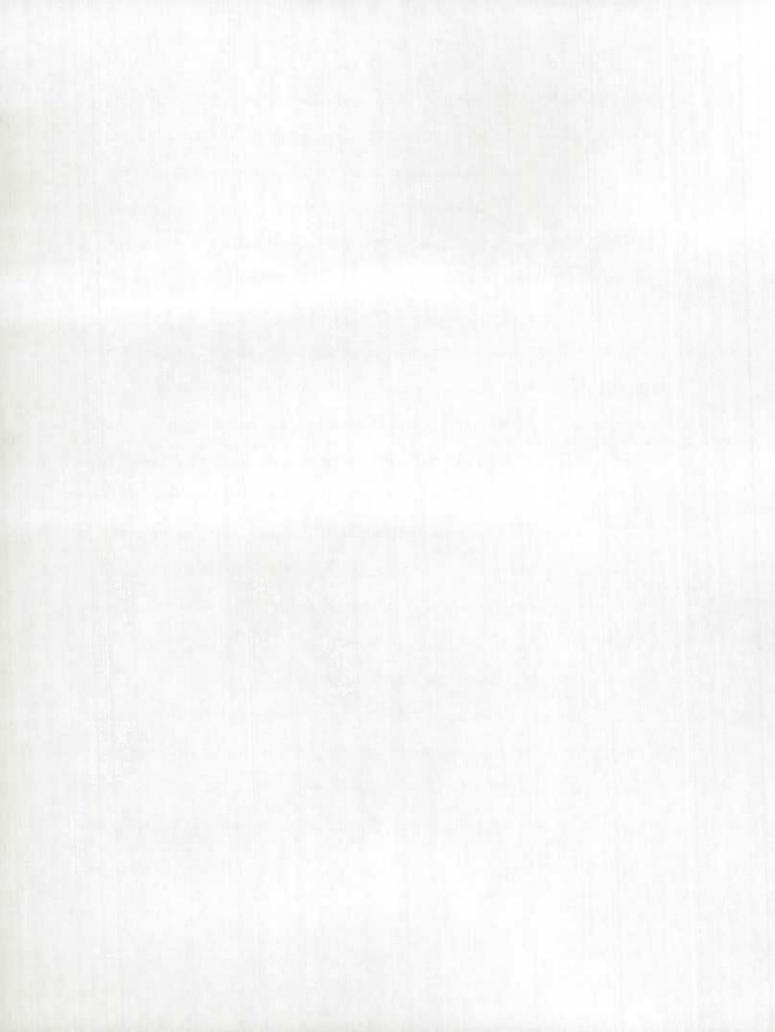
embark on a nation-wide publicity campaign to promote the sales of domestic goods and spend funds for advertising, etc. Here again, the expenditure is not a grant to business establishments as it constitutes direct purchases of goods and services by the Government Sector. These are just a few examples of indirect government assistance to business which do not meet the criteria of grant concept mentioned earlier.

Instead of giving the subsidies to the Business Sector, the government can also give funds to the consumers, i.e. Personal Sector, to boost up their purchasing power to buy the commodities produced by the businesses. In such a case, the Personal Sector, which includes non-profit institutions, would have the necessary funds to purchase the goods and services at the market prices determined by the businesses and there is no element of price reduction due to government intervention in the price fixing process. In such a case, there is, of course, the grant element in the transfer of funds by the Government Sector.

4.   Government Grants to the Non-Resident Sector

Government grants to the Non-Resident Sector include all transfers such as donations and payments under aid programs including contributions to international agencies for development assistance. As pensions to former employees do not meet the criteria of grant definition, and as they fall in the
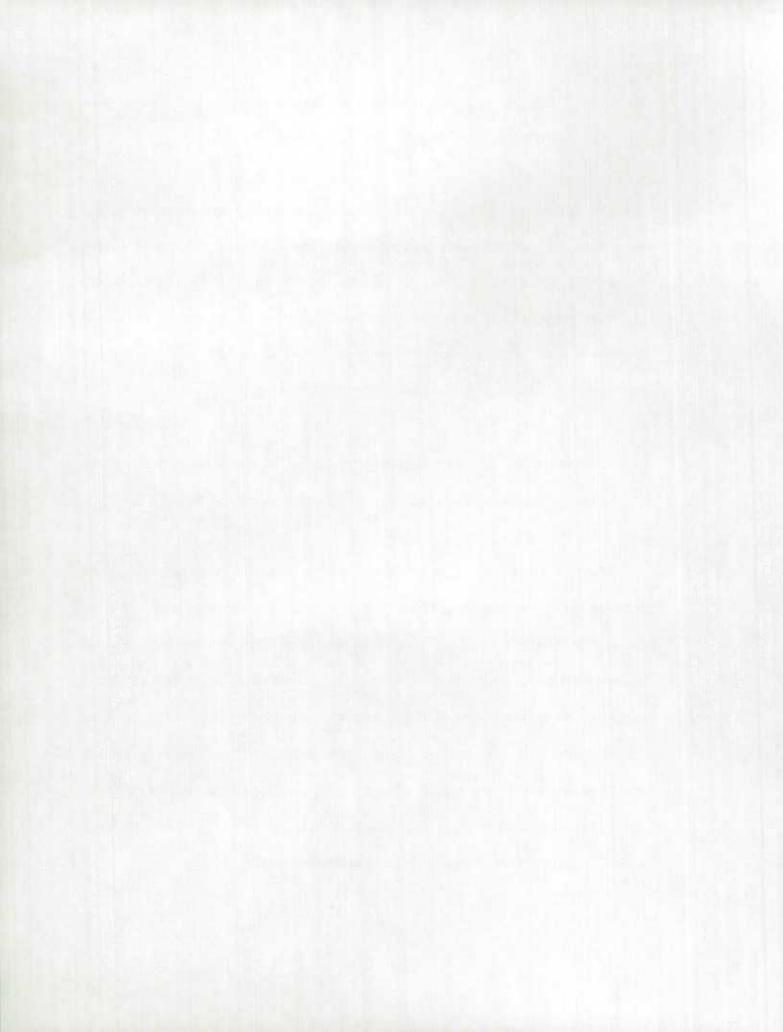
"trust fund" type transactions, such pensions paid abroad are outside the scope of the grant definition and they should not be included.

The government may give loans to the non-resident sector as a part of aid programs. As such loans are repayable, the transactions are _not_ grants. These loans may, however, generate quid pro quo transactions in the exchange economy such as exports from the donor country and imports by the donee country. Such transactions are measured and included in the exchange economy, i.e. GDP and are outside the grants economy.

If, however, these loans are not repaid and if the donor country writes off the loans, they become grants at that time for measurement in the SGA.

The governments can give services to other countries by way of professional services such as engineering services or medical services as a part of technical assistance programs. They can also render defence services by sending military troops to assist the country in the maintenance of peacekeeping. Such expenditures of governments, although they are indirectly benefitting the non-resident sector, are a part of the regular government operating costs which are incurred to promote international peace. There may be recovery of costs for such operations either from the international agencies or the non-resident sector. As such, they are outside the grants economy.

5. _Grants from the Personal Sector to the Government Sector_

The grant outflows from the Personal Sector to the Government Sector cover direct taxes such as income taxes, succession duties, estate taxes, hospital and medical insurance premiums and the like. If it is desired to use the published official data of SNA transfers of the Personal Sector, they should be filtered through the grant concept and items which do not meet the grant criteria should be reclassified. For example, the data in the Canadian SNA transfers have to be adjusted by reclassifying the item on "motor vehicle licences" to quid pro quo transactions, because there is an element of quid pro quo in those licences. In this case, the government, by granting the licence for a set fee, is authorizing the motor vehicle licence holder to utilize the vehicle on highways and roads. Without such a licence, the vehicle owner cannot, by law, use the highways and roads. Such authorization in the form of a licence entitles the licence holder to drive the vehicle on public highways and roads and the licence should be treated as a "sale of service" by the government and a corresponding purchase of a service by the licensee. This is the treatment which is recommended here for all sectors of the economy[20]. Following this concept, the published data of transfers received by the government from the Personal Sector have to be filtered and adjusted accordingly. (See Appendix 7 for details in the case of Canadian experience). In fact, all licences such as

---

[20] *At the present time, the Canadian SNA has two different treatments for the motor vehicle licences. While the licences paid by the Business Sector are treated as indirect taxes, those paid by the Personal Sector are treated as current transfers. This inconsistency in the treatment of the same type of transaction for the sectors can be eliminated if they are treated as "sale of service" for all sectors.*
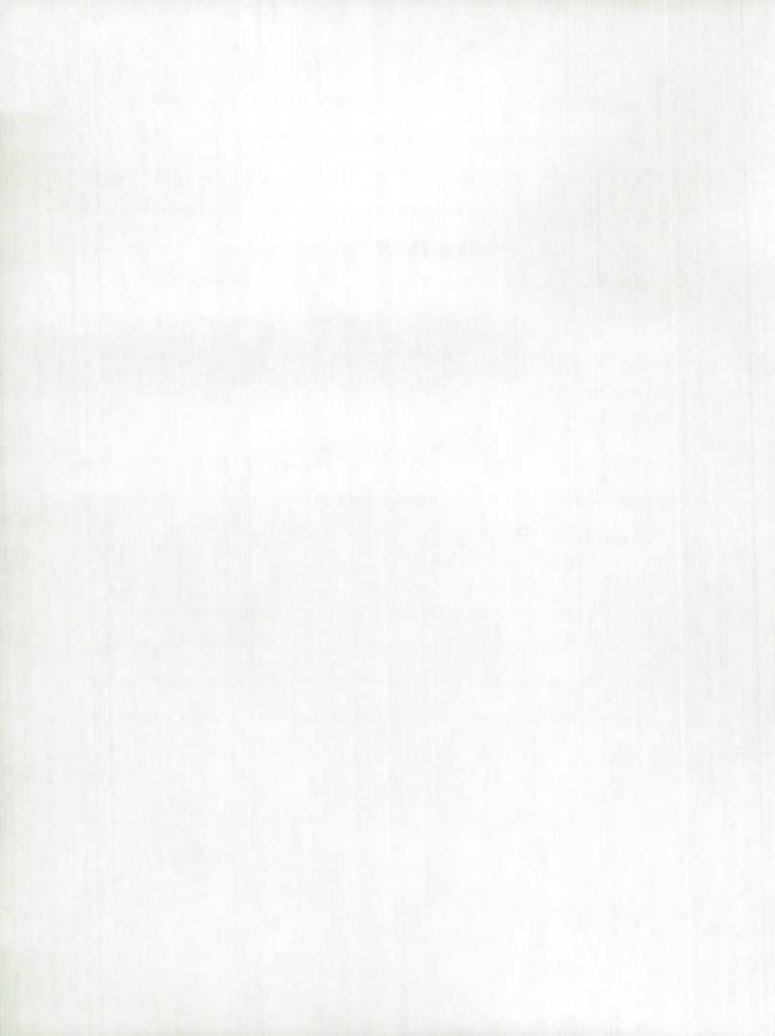
hunting, fishing, and marriage licences which have an element of quid pro quo should be treated as sale of service since the licence holders obtain, in exchange for the license fees, an additional privilege which they did not possess before. To that extent, it can be argued that their net worth increased to the extent of the additional privilege they possessed after they were given the licences. As the official published data of SNA transfers to the Personal Sector do not conform to the concept of grants, they should be filtered through the grant concept and adjusted accordingly in the same way as the motor vehicle licences.

Contributions made by persons to political parties have to be regarded as intra-sectoral transactions as political parties, being non-profit institutions, are a part of the Personal Sector.

6. *Grants from the Business Sector to the Government Sector*

The Business Sector's grants to the Government Sector contain direct taxes on profits such as taxes on income and profits. They may also contain other transactions such as contributions made via the Government Sector for disaster relief, etc .

7. *Grants from the Non-Resident Sector to the Government Sector*

The grants from the Non-Resident Sector to the Government Sector consist of direct taxes, namely, withholding taxes on earnings such as interest, dividends, rents, and royalties. They should also include contributions and donations from international agencies for development assistance or relief from disasters, famine, etc.

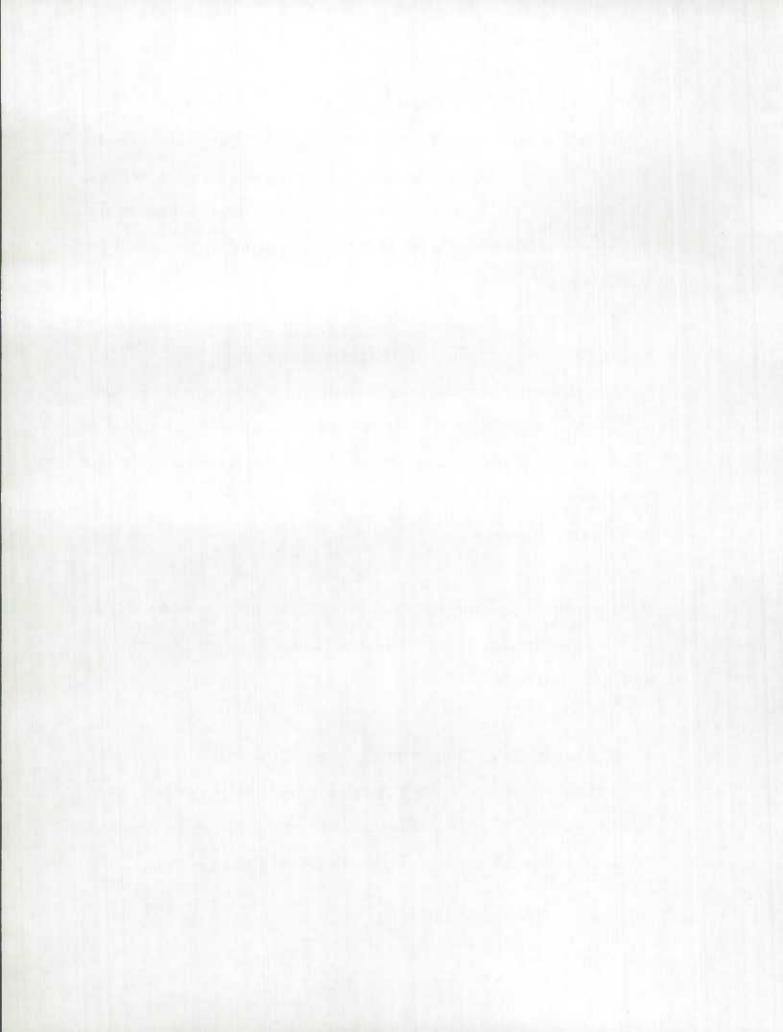8. *Grants from the Business Sector to Personal Sector*

Business Sector normally gives charitable contributions to the Personal Sector. Also, bad debts between the Business Sector and the Personal Sector can get written off the accounts. Such bad debts, that become write-offs fall into the definition of grants and they should be included in this category of grants to the Personal Sector.

Also, political contributions made by the Business Sector have to be measured here as the political parties are classified to non-profit institutions in the Personal Sector.

9. *Grants from the Personal Sector to the Business Sector*

Personal Sector pays interest on consumer debt to the Business Sector. According to the Canadian SNA concepts, the interest paid by consumers on the debt has two elements: service element and the transfer element. In the

SGA, the transfer element should be treated as grant from the Personal Sector to the Business Sector as the service element is already included in the quid pro quo type transaction of the Canadian SNA.
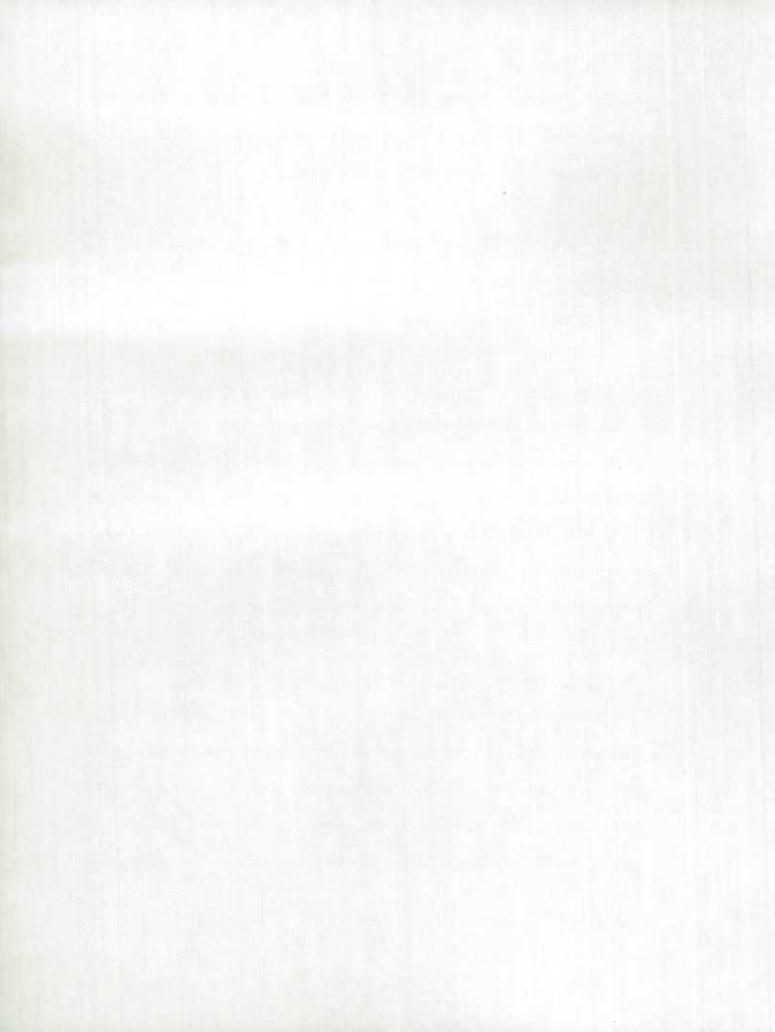
In addition, if the Personal Sector's loans to the Business Sector (e.g. corporate bonds) are not paid off due to bankruptcies, such unpaid loans have to be treated as grants from the Personal Sector.

10. Grants from the Business Sector to the Non-Resident Sector

Business Sector pays withholding taxes and income taxes to the Non-Resident Sector on the income or transfer of funds relating to profits, interest, dividends, rents, etc. and these taxes should be treated as grants to the Non-Resident Sector. This category of grants should also include Business Sector's donations to other countries for relief from disasters such as earthquakes and famine or contributions for technical assistance programs.

11. Grants from the Personal Sector to the Non-Resident Sector

Personal Sector pays withholding taxes or income taxes to the Non-Resident Sector on their earnings abroad. Such taxes are grants. In addition, personal remittances to the Non-Resident Sector and donations of non-profit institutions such as churches for development assistance or disaster relief should also be included in this category of grants from the Personal Sector.

12. *Grants from the Non-Resident Sector to the Personal Sector*

Non-Resident Sector remits funds to individuals and non-profit institutions which are a part of the Personal Sector. These remittances are grants to the Personal Sector. Also, donations and contributions of international agencies such as the International Red Cross meant for relief of disasters should be included in the grants from the Non-Resident Sector going directly to the Personal Sector. If the donations are routed through the governments, they should be a part of grants to the Government Sector from the Non-Resident Sector.
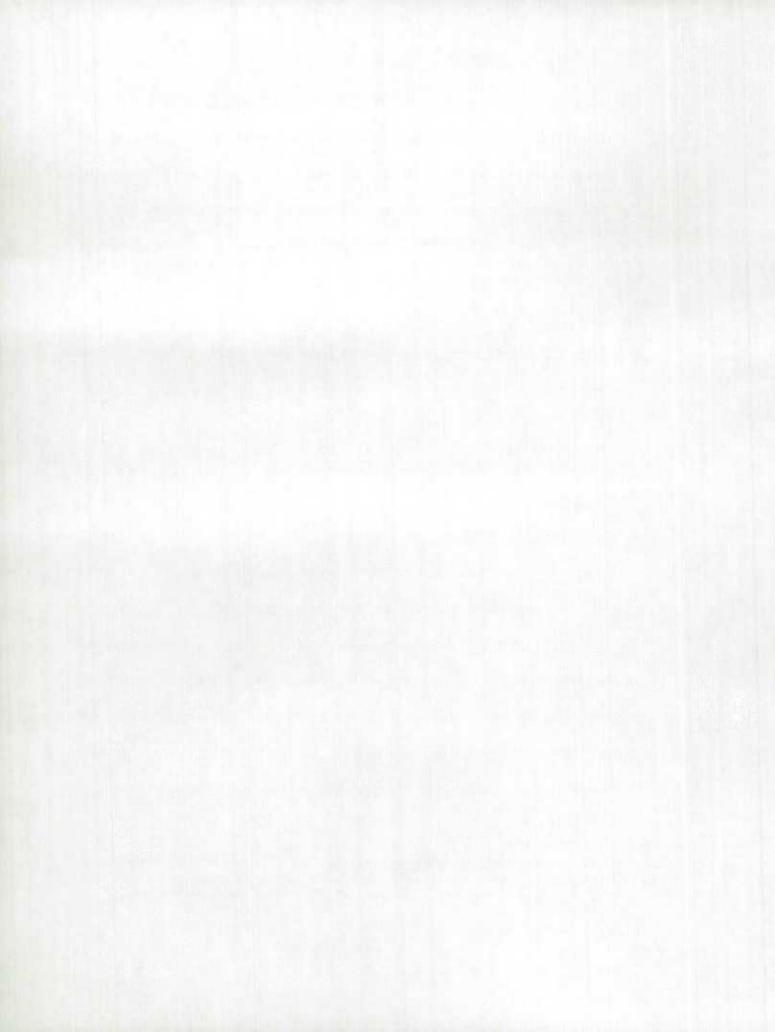
IV *Sources of Data and Standard Analytical Tables*

A. *Data Sources*

1. *SNA Database on Transfers*

Some of the basic data required for the SGA can be obtained from the SNA tables on transfers. (For example see Canadian National Income and Expenditure Accounts[21]). Before using the data, however, the items contained in the transfer payments and receipts have to be filtered through the "grant" concept. The presently published SNA 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 to be

---

[21] *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.*

removed and the balance retained for data on "grants" only[22]. (See Appendices

6 and 7) for details in the case of Canadian experience)

Also, in the SNA, the data of the unincorporated business are combined

with the Personal Sector in the Sector Accounts. (See Canadian National

Income and Expenditure Accounts[23]). It is essential to use the same grouping

of institutions in the sectors to maintain conceptual and statistical consistency
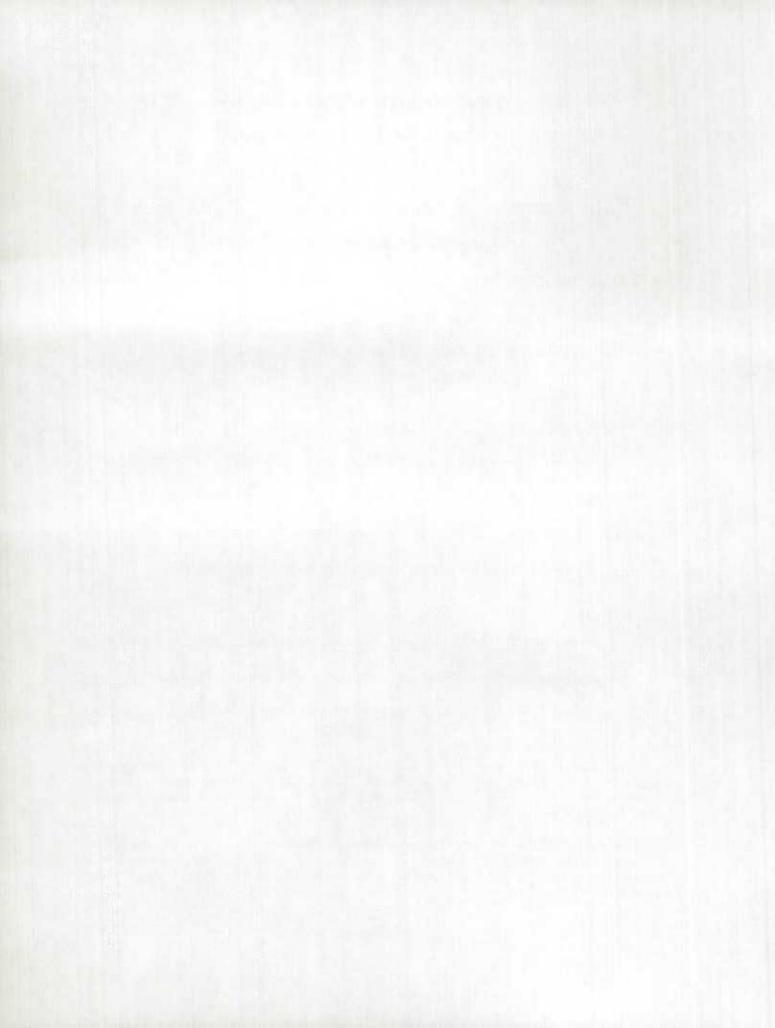
between the two systems (i.e. SNA and SGA).

2. Other Sources

Since the SNA transfers alone do not cover the entire universe of grants,

they represent only partial data as far as grants are concerned. In order to

cover the universe of grants, additional sources of data have to be identified

and surveyed if necessary to reflect a complete picture in the SGA.

For example, bankruptcies give rise to unpaid loans. They can also result

in defaults to pay the bills which are usually classified to "accounts payable"

in the Balance Sheet. These transactions which stem from bankruptcies would

---

[22] *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.*

[23] *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 are not separated at this time in the Canadian Sector Accounts of the SNA.*
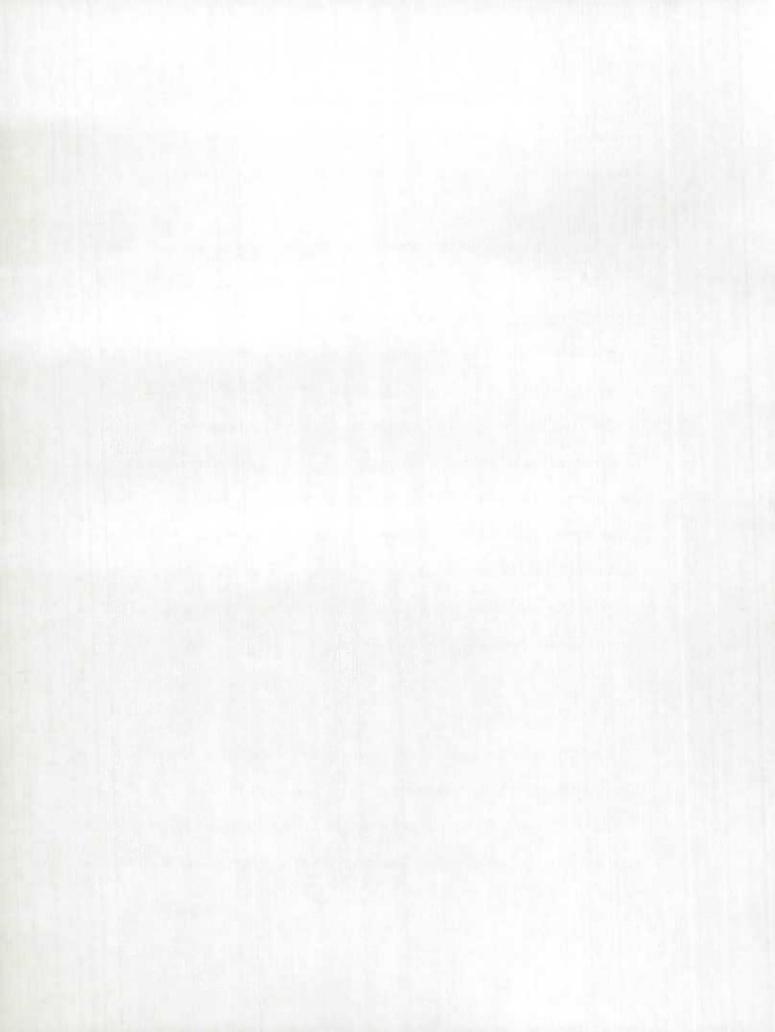
have to be studied and data on grants developed for the SGA. This recommendation is applicable to all domestic transactions as well as international transactions which cross the sectoral boundaries.

In general, bankruptcies and loans contain a good source of data for research as far as the SGA is concerned. Also, <u>disaster relief assistance normally given directly</u> by business, international agencies, foreign governments, private individuals, and non-profit institutions may not be included in the SNA data as they are not normally channelled through the Government Sector. Some surveys to capture such data may have to be instituted by statistical agencies to collect the statistics on a regular basis from the donor institutions. Therefore, further research is needed to develop a complete and comprehensive database for the SGA particularly in the areas such as loans, bankruptcies, court cases, and grants involved in the international operations of non-profit institutions (e.g. churches etc.) as well as international agencies (e.g. United Nations etc.).
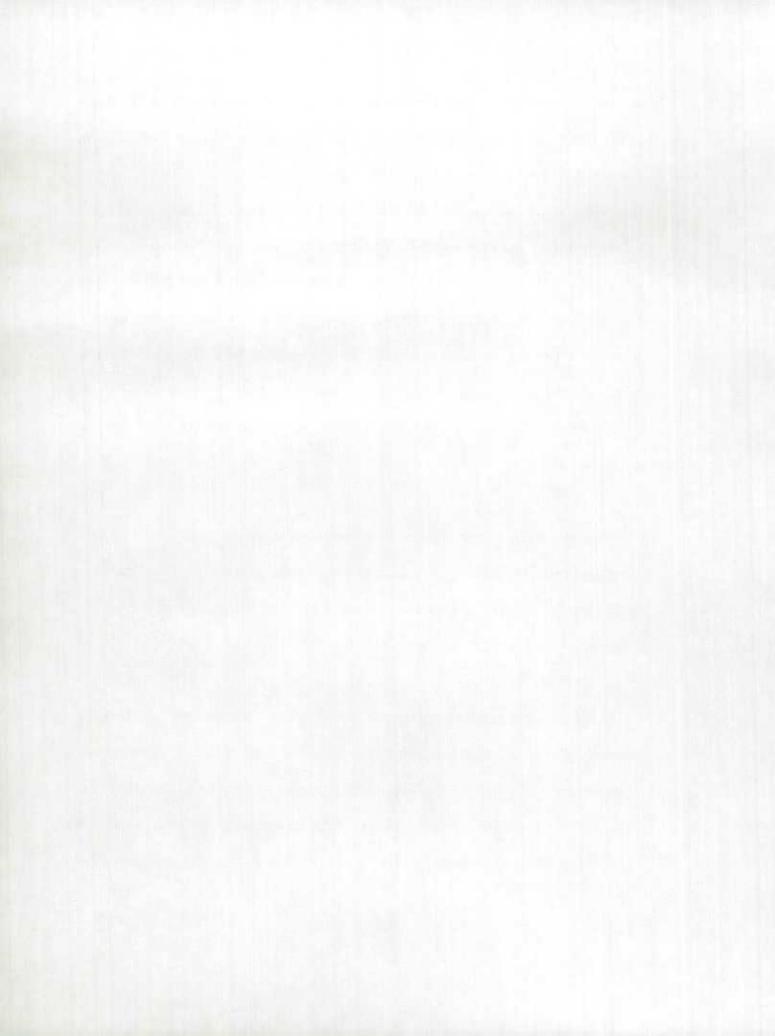
3. *Canadian Experience*

The conceptual and analytical framework recommended in this System of Grant Accounts was implemented in an earlier study entitled "The Need For A System of Grant Accounts" presented at the 19th Annual Meetings of the Eastern Economic Association, Washington DC, during March 1993. In that

study, the SGA conceptual framework was applied on an experimental basis

to the Canadian SNA Government transfers data i.e. transfers to and from the

Government Sector. The results which were presented in the previous study

are repeated here just to give an idea of the Canadian Grants Economy at least

on a partial basis. It is partial because it only covers the SNA transfers, but

does not cover the grants arising in situations such as bankruptcies, loans

losses, etc for which special research studies and additional surveys are needed

to compile the necessary information. Unless and until those situations are

also covered by the appropriate studies and surveys, a complete and

comprehensive picture of the Grants Economy would not be available for

analysis.

With this known limitation, let me now present some results of the partial

data just to give a comparative idea of the growing Grants Economy and the

shifts that have been taking place during the last 3 decades as far as the

Government Sector is concerned. (See Appendix 8)

Based on the Canadian experience, the net Grant Originating (GO) in 1961

from the Personal, Business, and Non-Resident Sectors to the Government

Sector was at a positive level for a combined total of about $2.3 billion which

was 5.6% of the GDP. In other words, the Government Sector was the net

beneficiary while the other sectors played the roles of donors in the Canadian
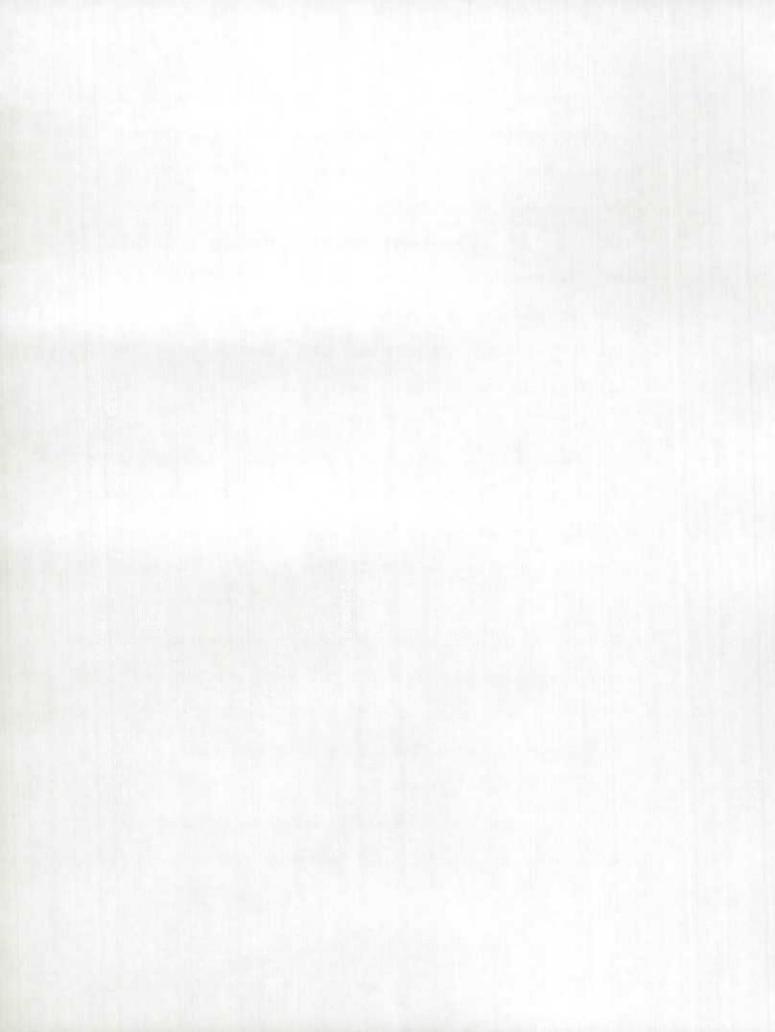
Grants Economy. (Appendix 8) However, by 1991, that position changed significantly. First, there was a marked upward trend in the level of net Grant Originating from the Personal Sector in contrast to a sharp declining trend in the net Grant Originating from the Business Sector. The personal sector's net Grant Originating which was $849 million in 1961 or 2.1% of the GDP rose substantially by 1991 to about $62 billion or 9.1% of the GDP; but the Business Sector's net Grant Originating which was about $1.4 billion in 1961 or 3.4% of the GDP declined by 1991 to a low level of about $300 million with an insignificant proportion to GDP.

Second, the Non-Resident Sector's role of a donor in 1961 got shifted to that of a donee as it became the __net__ beneficiary by 1991. In 1961, the Non-Resident Sector's net Grant Originating was $60 million while in 1991, it became the net beneficiary to the extent of about $1 billion.

These results indicating which sectors of the economy were the net donors or net beneficiaries would not be available without the new Grant Originating (GO) formula advocated in the SGA, because the traditional method of analyzing gross flows would show only one side of the picture.

It should be noted, however, that the results of the Canadian experience mentioned above are based on partial database covering the SNA transfers
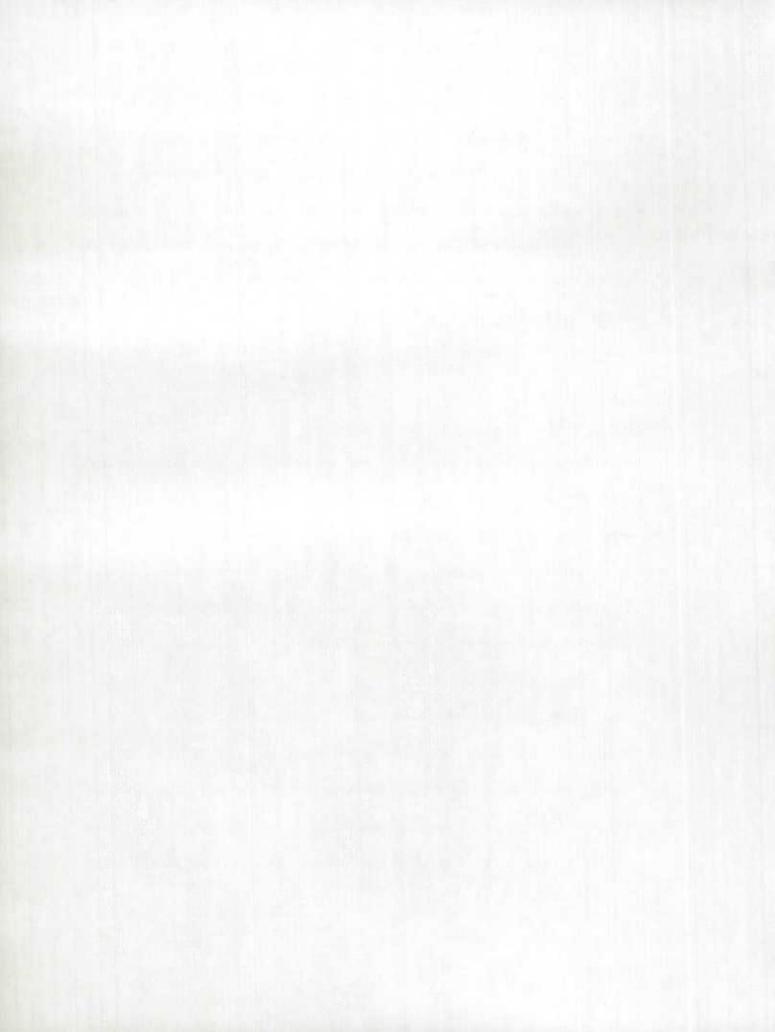
only. If other areas such as bankruptcies and loan losses etc. are also included, the magnitude of the Canadian Grants Economy would certainly be larger. Therefore, further research is needed to pull together all the data of "other areas" (i.e. bankruptcies, loan losses, etc.) to develop a complete picture of the Grants Economy. It is recommended that national statistical agencies and international organizations should give priority to this area of research for the development of the separate grants database in view of the growing importance of the Grants Economy.

B. *Standard Analytical Tables*

As mentioned earlier, six dimensions are needed for the SGA to articulate data based on the GO formula. These dimensions could be summarized in the following suggested standard analytical tables. In addition to a separate table for each of the six dimensions, consolidated Grant Originating Accounts for each of the three sectors are also suggested for analytical use. Since this paper provides an outline for a System of Grant Accounts, no actual data have been provided in the suggested tables that follow.

    (i)   Grants between the Government Sector and the Business Sector;

    (ii)   Grants between the Government Sector and the Personal Sector;

    (iii)   Grants between the Government Sector and the Non-Resident Sector;

    (iv)   Grants between the Business Sector and the Personal Sector;

    (v)   Grants between the Business Sector and the Non-Resident Sector;

47

(vi)   *Grants between the Personal Sector and the Non-Resident Sector;*

(vii) *Consolidated Grant Originating Account of the Government Sector;*

(viii) *Consolidated Grant Originating Account of the Business Sector; and*

(ix)   *Consolidated Grant Originating Account of the Non-Resident Sector.*

(x)   *Consolidated Grant Originating Account of the Personal Sector*

Table 1:   *Grants between the Government Sector and the Business Sector*

Year	*Grant Payments of the Government Sector*	*Grant Receipts from the Business Sector*	*Grant Originating or Net Grant Outflow*
	By Level of Government such as:		
	A. Federal Government		
	B. Provincial Government		
	C. Local Government		

Table 2:   *Grants between the Government Sector and the Personal Sector*

Year	*Grant Payments of the Government Sector*	*Grant Receipts from the Personal Sector*	*Grant Originating or Net Grant Outflow*
	By Level of Government such as:		
	A. Federal Government		
	B. Provincial Government		
	C. Local Government		

Table 3: <u>*Grants between the Government Sector and the Non-Resident Sector*</u>

Year	*Grant Payments of the Government Sector*	*Grant Receipts from the Non-Resident Sector*	*Grant Originating or Net Grant Outflow*

By Level of Government
    such as:

A. Federal Government
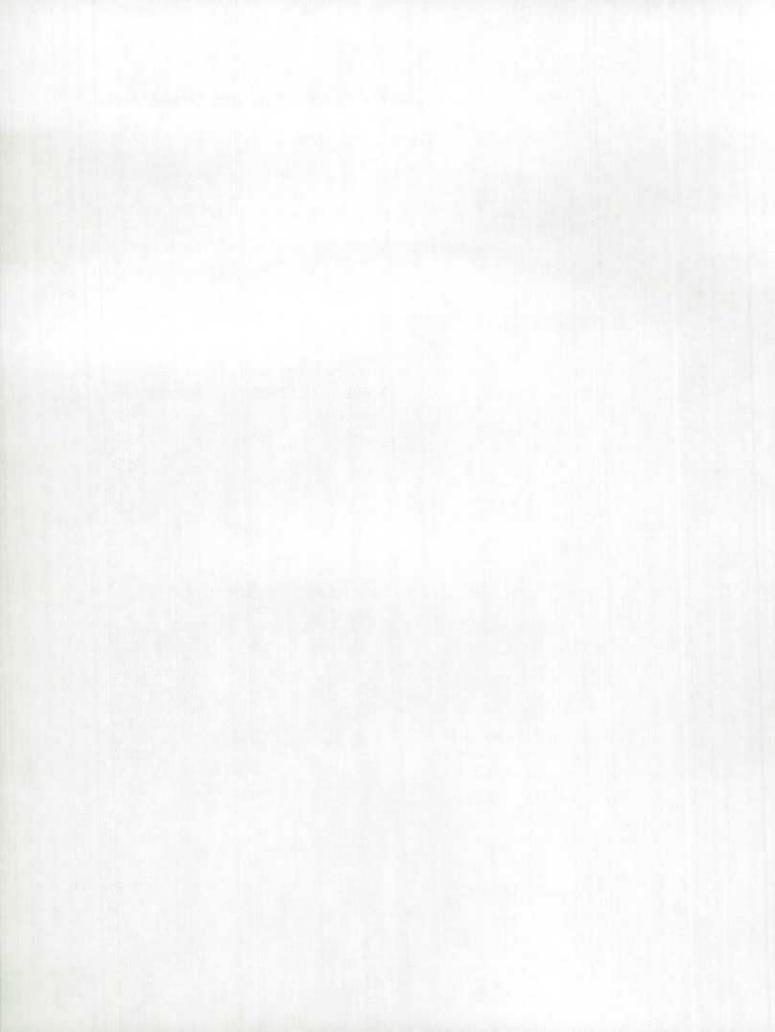*B. Provincial Government*
C. Local Government

Table 4: <u>*Grants between the Business Sector and the Personal Sector*</u>

Year	*Grant Payments of the Business Sector*	*Grant Receipts from the Personal Sector*	*Grant Originating or Net Grant Outflow*

Table 5: <u>*Grants between the Business Sector and the Non-Resident Sector*</u>

Year	*Grant Payments of the Business Sector*	*Grant Receipts from the Non-Resident Sector*	*Grant Originating or Net Grant Outflow*

Table 6: *Grants between the Personal Sector and the Non-Resident Sector*

Year	*Grant Payments of the Personal Sector*	*Grant Receipts from the Non-Resident Sector*	*Grant Originating or Net Grant Outflow*

Table 7: *Consolidated Grant Originating Account of the Government Sector*

Year	*Grant Originating from the Business Sector*	*Grant Originating from the Personal Sector*	*Sub-Total*	*Grant Originating from the Non-Resident*	*Total Grant Originating*

Table 8: *Consolidated Grant Originating Account of the Business Sector*

Year	*Grant Originating from the Personal Sector*	*Grant Originating from the Non-Resident Sector*	*Grant Originating from the Government Sector*	*Total Grant Originating*

By Level of Government such as:

A. Federal Government
B. Provincial Government
C. Local Government

Table 9: <u>Consolidated Grant Originating Account of the Non-Resident Sector</u>

Year	*Grant Originating from the Business Sector*	*Grant Originating from the Personal Sector*	*Grant Originating from the Government Sector*	*Total Grant Originating*
			By Level of Government such as:	
			A. Federal Government	
			B. Provincial Government	
			C. Local Government	

Table 10: <u>Consolidated Grant Originating Account of the Personal Sector</u>

Year	*Grant Originating from the Government Sector*	*Grant Originating from the Business Sector*	*Grant Originating from the Non-Resident Sector*	*Total Grant Originating*

By Level of Government such as:

A. Federal Government
B. Provincial Government
C. Local Government

These standard tables constitute the main database of the SGA within the conceptual and classification framework discussed in this report. Further research is needed in several areas. One such area is the disaggregation of interest on the public debt by the receiving sectors. The other area is the disaggregation of personal income taxes between personal account and the business account to separate unincorporated business from the personal income taxes. One might also wish to disaggregate the Personal Sector database by income levels in order to identify the groups for grant flows and changes thereof in the time series. There may be several other areas which might come to the
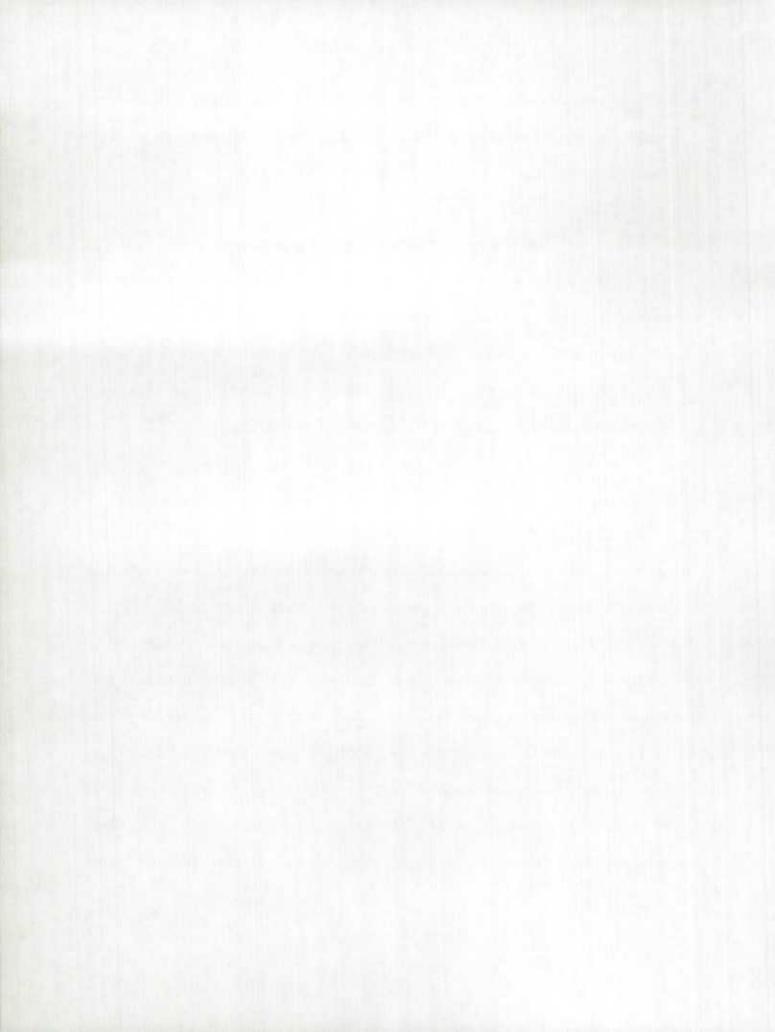
51

surface in the process of analyzing the SGA database proposed here. Additional tables may have to be developed based on extensions to articulate them in the System of Grant Accounts.

It is also advisable to present data on loans and organize them by sectors in a set of additional tables for a better understanding of the debt structure by sectors. Such tables would be indispensable to monitor the debt by category -- public debt, business debt, and the consumer debt -- as to the levels and changes thereof. The time series of debt data would be very useful for analysis along with the standard tables suggested in the System of Grant Accounts.

V *Conclusion*

In conclusion, there are several advantages in recording and presenting grant transactions within a consistent accounting framework called the "System of Grant Accounts" (SGA). 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
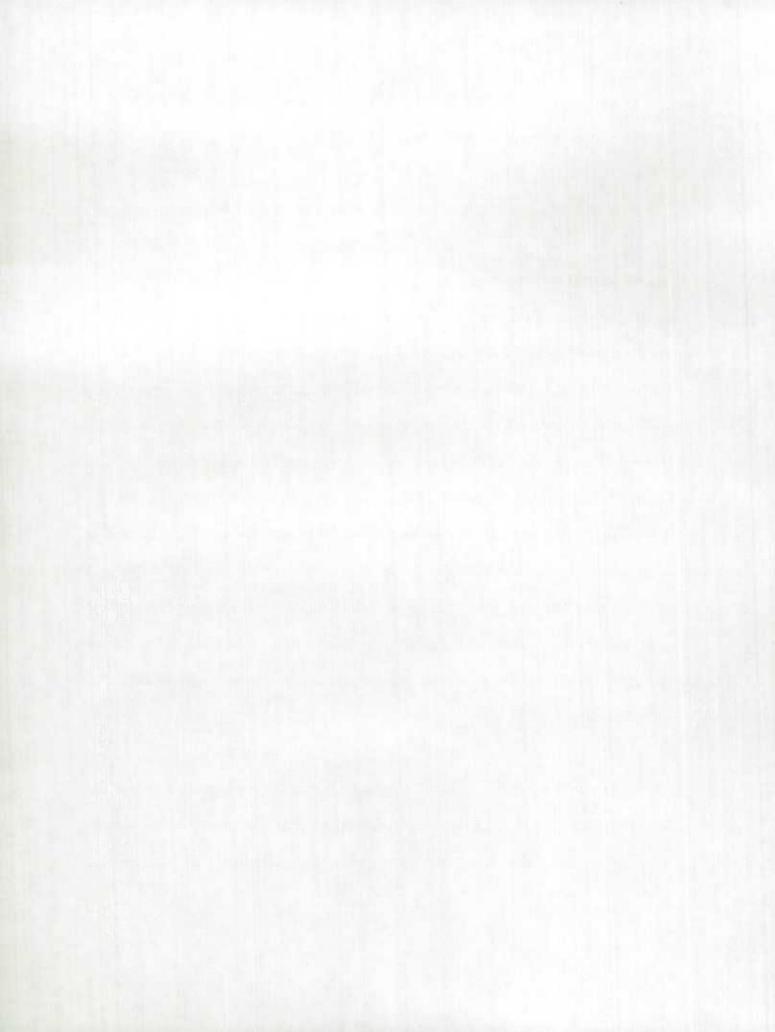
conforms solely to grant definitions and analytical requirements should be developed to provide ready information for policy formulation on grants.

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. If these two options are not followed i.e. if a separate System of Grant Accounts is <u>not</u> developed and if the SNA "transfers" are <u>not</u> 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 containing all "non quid pro quo" type transactions grouped together in one category called SNA "transfers". The use of such unadjusted SNA "transfers" data for grants analysis and policies is not recommended because misleading results would emerge. Also, the SNA transfers database does not cover the complete universe for grants as grant elements contained in the additional sources such as bankruptcies, loan losses etc are not in it. Those additional sources have to be analyzed and grants data derived and included in a separate exercise to obtain a complete picture of the Grants Economy.

The net outflow approach based on the GO concept recommended in the SGA reflects the effect of implicit grants involved in th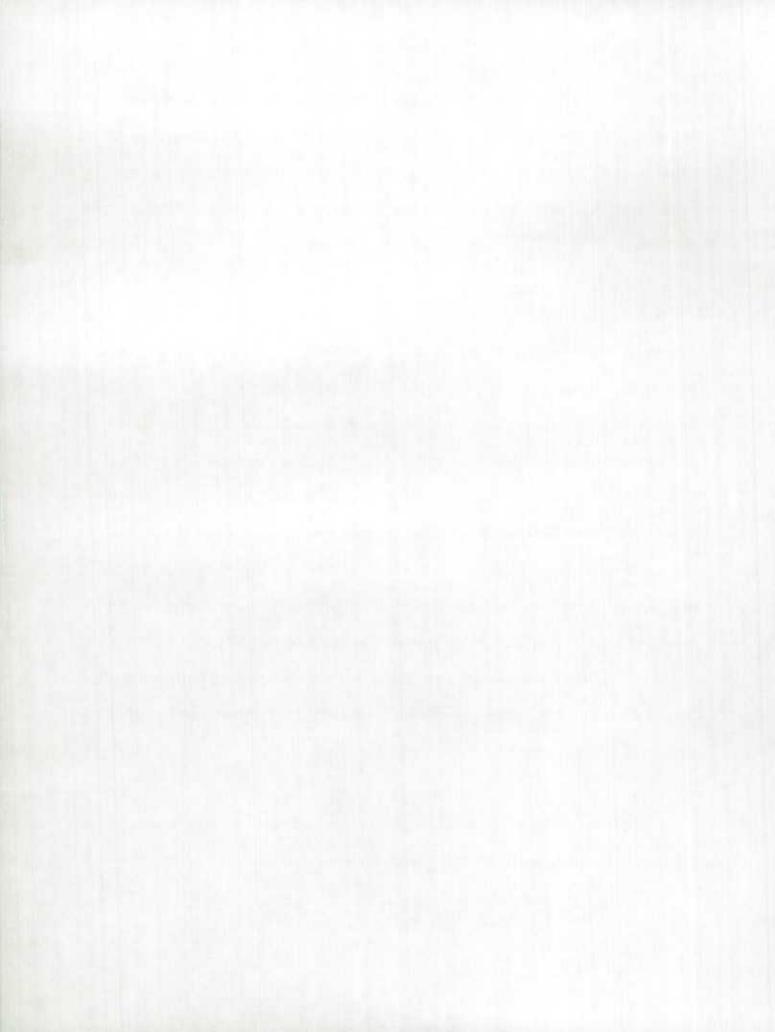e government policies of grant giving. If, instead of giving a certain amount of grant, the government decides to give a
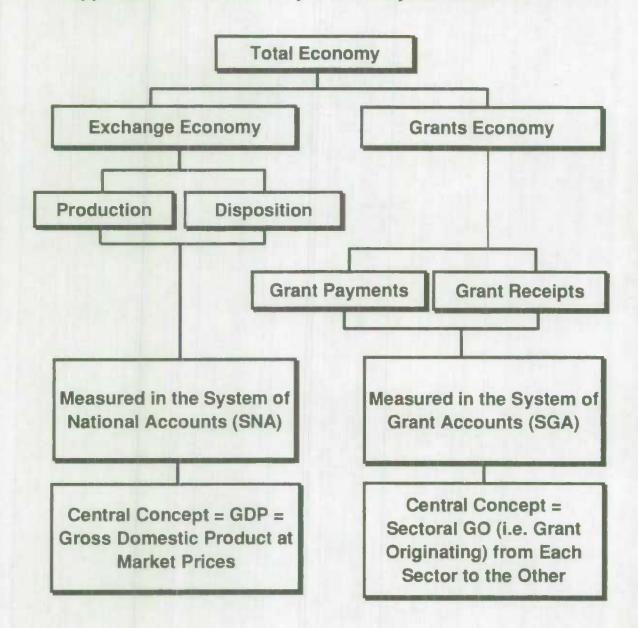
reduction in the grant inflow from the sector concerned, the effect of the implicit grant transaction for which data are normally not available would be hidden. Also, as the grant outflows from the Personal and Business Sectors are mainly income taxes, the database of the System of Grant Accounts can be used in studies concerning income taxation.
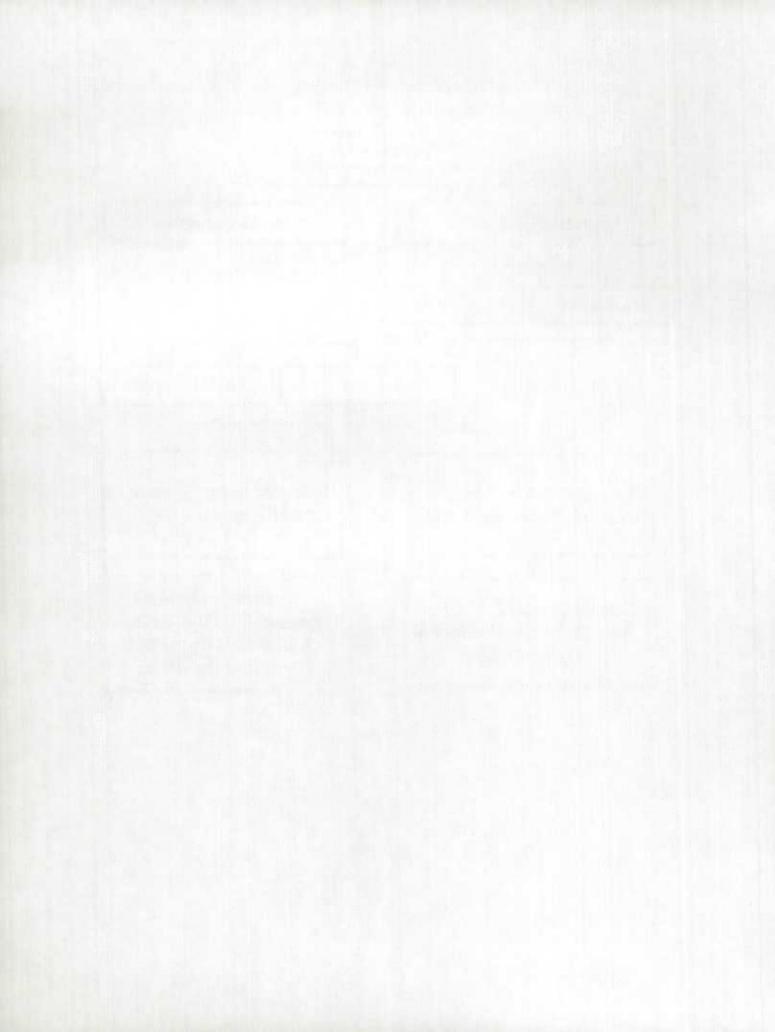
If a consistent framework such as the one recommended here is used for the System of Grant Accounts by all countries, inter-country comparison of grants would be possible. As the suggested standard analytical tables relating to the Non-Resident Sector reveal the transactions with the rest-of-the-world, they would be useful for further research on international grants not only for national statistical agencies but also for international organizations such as the World Bank, International Monetary, Fund, and United Nations. The System of 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 researchers of the Grants Economy as consistent data would be available in one central publication just like the data of the SNA. It is hoped that all the concerned agencies would recognize the growing importance of the Grants Economy and assign the necessary priority for the implementation of the System of Grant Accounts.

This System of Grant Accounts is a preliminary document and may be revised and expanded depending on future analytical requirements.

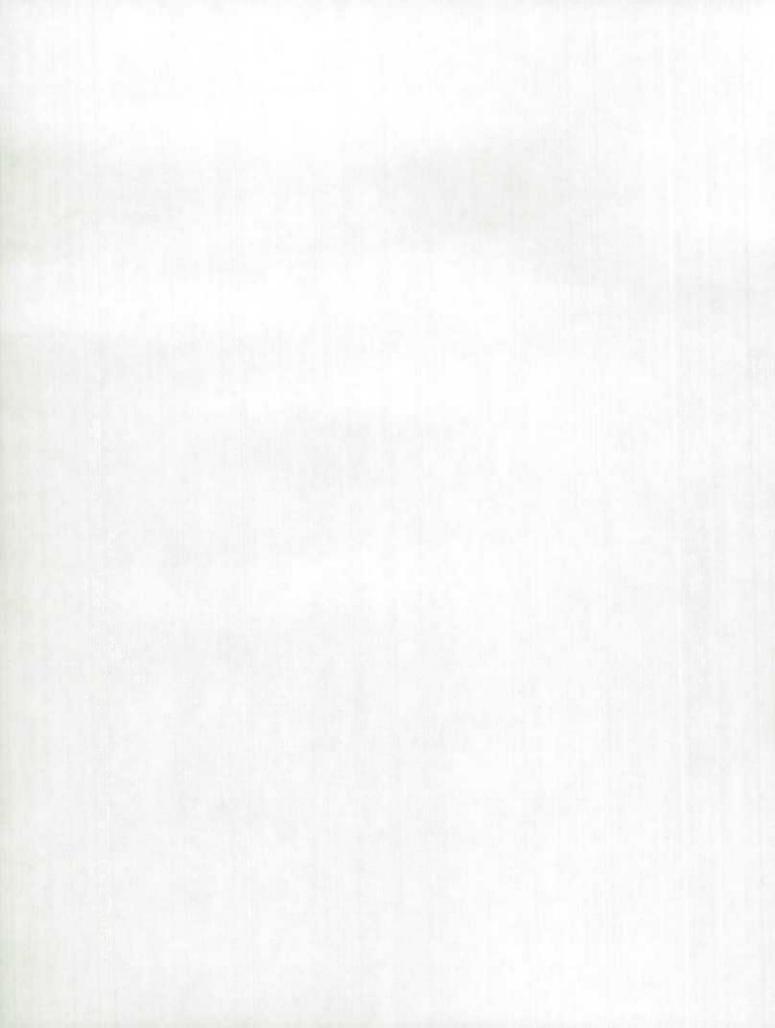# Appendix 1. Total Economy and The Systems of Measurement

```
                        ┌──────────────────┐
                        │  Total Economy   │
                        └──────────────────┘
            ┌────────────────────┴────────────────────┐
  ┌──────────────────┐                      ┌──────────────────┐
  │ Exchange Economy │                      │  Grants Economy  │
  └──────────────────┘                      └──────────────────┘
      ┌──────┴──────┐                                │
┌────────────┐ ┌────────────┐          ┌─────────────┴─────────────┐
│ Production │ │ Disposition│   ┌────────────────┐ ┌────────────────┐
└────────────┘ └────────────┘   │ Grant Payments │ │ Grant Receipts │
        │                       └────────────────┘ └────────────────┘
        │                                   │
┌────────────────────────┐       ┌────────────────────────┐
│ Measured in the System │       │ Measured in the System │
│ of National Accounts   │       │ of Grant Accounts      │
│ (SNA)                  │       │ (SGA)                  │
└────────────────────────┘       └────────────────────────┘
        │                                   │
┌────────────────────────┐       ┌────────────────────────┐
│ Central Concept = GDP =│       │ Central Concept =      │
│ Gross Domestic Product │       │ Sectoral GO (i.e. Grant│
│ at Market Prices       │       │ Originating) from Each │
│                        │       │ Sector to the Other    │
└────────────────────────┘       └────────────────────────┘
```

55

APPENDIX 2. GRANTS FROM PUBLIC SECTOR OF CANADA
($ Millions)

	1 TOTAL GOVERNMENT EXPENDITURES ON GOODS & SERVICES	2 TOTAL PUBLIC GRANTS	3 TOTAL GOVERNMENT EXPENDITURES ON GOODS & SERVICES AND GRANTS	4 1 AS % OF 3	5 2 AS % OF 3
1961	7848	1907	9755	80.5	19.5
1962	8467	2141	10608	79.8	20.2
1963	8896	2251	11147	79.8	20.2
1964	9494	2463	11957	79.4	20.6
1965	10699	2610	13309	80.4	19.6
1966	12485	3077	15562	80.2	19.8
1967	14074	3631	17705	79.5	20.5
1968	15698	4113	19811	79.2	20.8
1969	17247	4559	21806	79.1	20.9
1970	19608	5045	24653	79.5	20.5
1971	21933	6028	27961	78.4	21.6
1972	24104	6298	30402	79.3	20.7
1973	27106	7250	34356	78.9	21.1
1974	32916	10775	43691	75.3	24.7
1975	39540	13511	53051	74.5	25.5
1976	44560	13870	58430	76.3	23.7
1977	50195	15252	65447	76.7	23.3
1978	54527	17032	71559	76.2	23.8
1979	59685	18808	78493	76.0	24.0
1980	67542	23823	91365	73.9	26.1
1981	78034	27285	105319	74.1	25.9
1982	89243	31629	120872	73.8	26.2
1983	94921	36529	131450	72.2	27.8
1984	100499	40938	141437	71.1	28.9
1985	108341	42018	150359	72.1	27.9
1986	112661	42063	154724	72.8	27.2
1987	118684	44090	162774	72.9	27.1
1988	128226	44993	173219	74.0	26.0
1989	138979	46154	185133	75.1	24.9
1990	150529	50349	200878	74.9	25.1
1991	157046	57612	214658	73.2	26.8

Source: Murty, P.S.K. "The Need for a System of Grant Accounts", Technical Series no.56, Input-Output Division, Statistics Canada, Ottawa, Canada, 1993, Page 40.

Appendix 3. Total Government Spending in Canada on Goods & Services and Grants Combined

Grants
19.55%

Grants
26.84%

Goods & Services
80.45%

Goods & Services
73.16%

1961

1991

APPENDIX 4. GDP AND GRANTS FROM PUBLIC SECTOR OF CANADA
($ Millions)

	1 GRANTS FROM GOVERNMENT SECTOR TO PERSONAL SECTOR	2 GRANTS FROM GOVERNMENT SECTOR TO INCORPORATED BUSINESS SECTOR	3 GRANTS FROM GOVERNMENT SECTOR TO NON-RESIDENT SECTOR	4 TOTAL	5 GDP AT MARKET PRICES	6 4 AS % OF 5
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

Source: Murty, P.S.K. "The Need for a System of Grants Accounts", Technical Series no.56,
Input-Output Division, Statistics, Ottawa, Canada, 1993, Page 37.

Appendix 5. Grants from Public Sector of Canada: Percentage to G.D.P. at Market Prices

APPENDIX 6: SNA TRANSFERS FROM THE GOVERNMENT SECTOR TO THE PERSONAL SECTOR AND GRANTS

AS PUBLISHED	GRANTS	TRUST FUND TYPE	QUID PRO QUO
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

APPENDIX 6: SNA TRANSFERS FROM THE GOVERNMENT SECTOR TO THE PERSONAL SECTOR AND GRANTS

AS PUBLISHED	GRANTS	TRUST FUND TYPE	QUID PRO QUO
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	

61

APPENDIX 7: SNA TRANSFERS FROM THE PERSONAL SECTOR TO THE GOVERNMENT SECTOR AND GRANTS

AS PUBLISHED	GRANTS	TRUST FUND TYPE	QUID PRO QUO
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		

APPENDIX 8. NET GRANTS TO PUBLIC SECTOR AS PERCENTAGE OF GDP: CANADIAN EXPERIENCE ($ millions)

	1 GDP	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	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

Source: See "The Need for A System of Grant Accounts" by P.S.K. Murty,
Technical Series no.56, Statistics Canada, Input-Output Division, Ottawa, March 1992, p.39.

REFERENCES

1. Horvath, Janos "On the Evaluation of International Grants Policy", *Public Finance*, 1971.

2. Horvath, Janos "Rural America and the Grants Economy", *American Journal of Agricultural Economics*, December 1971.

3. Boulding, Kenneth E., Martin Pfaff, and Janos Horvath, "Grants Economics: A Simple Introduction", *American Economist*, Spring 1972.

4. Boulding, Kenneth E., "Puzzles Over Distribution", *Challenge*, November - December, 1985.

5. Boulding, Kenneth E., "The Grants Economy", Presidential Address delivered to the Michigan Economics Association, Grand Vally State College, Michigan, March 22, 1968 at the Annual Meeting of the Michigan Academy of Science, Arts, and Letters , *Michigan Academician*, Vol. 1, No. 1, Winter 1969, Ann Arbor, Michigan.

6. 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.

7. United Nations, *National Accounts Statistics: Main Aggregates and detailed tables* 1986, New York 1986.

8. Statistics Canada, *National Income and Expenditure Accounts*, Annual estimates, 1926-86, Catalogue 13-531, Ottawa, June 1988.

9. 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, Input-Output Division, Technical Series No. 24, Statistics Canada.

10. Statistics Canada, *National Income and Expenditure Accounts*, Annual estimates, 1978-89, Catalogue 13-201, Ottawa, December 1990.

11. Murty, P.S.K. and Yusuf Siddiqi, *A New Paradigm to Analyze Commodity Indirect Taxes and Subsidies, 1986-1989*, April 5, 1991, Input-Output Division, Technical Series No. 35, Statistics Canada.

REFERENCES (CONT'D)

12. 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, Input-Output Division, Technical Series No. 33, Statistics Canada.

13. 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, Input-Output Division, Technical Series No. 45, Statistics Canada.

14. Statistics Canada, *National Income and Expenditure Accounts*, Annual estimates 1980-1991, Catalogue 13-201, Ottawa, August 1992.

15. 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, Input-Output Division, Technical Series No. 48, Statistics Canada.

16. 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 held in Anaheim, California, January 5-7, 1993, Input-Output Division, Technical Series No. 54, Statistics Canada .

17. 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 held in Paris at the American University of Paris, France, January 8-12, l993, Input-Output Division, Technical Series No. 53, Statistics Canada.

18. 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, Input-Output Division, Technical Series No. 55, Statistics Canada.

19. Murty, P.S.K., *The Need for A System of Grant Accounts*, presented at the 19th Annual Meetings of the Eastern Economic Association held in Washington, DC, March 19-21, 1993, Input-Output Division, Technical Series No. 56, Statistics Canada.

REFERENCES (CONT'D)

20. *Sunga Preetom S., "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.*

21. *Goldberg S.A., "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)*

22. *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)*

66

TECHNICAL SERIES/CAHIERS TECHNIQUES

INPUT-OUTPUT DIVISION/DIVISION DES ENTRÉES-SORTIES

STATISTICS CANADA/STATISTIQUE CANADA

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

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

(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., and Diena, J., Highlights of the Public Sector Market Study, 1983, Input-Output Division, Statistics Canada, September 1987.

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

(6)
Durand, R., The Adding-Up Problem in the Computation of Aggregate Constant 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., Généreux, P.A., Leblanc, D., and Greenberg, M., Provincial Sales Tax Commodity Allocation Project, 1984 Sources and Methods, Input-Output Division, Statistics Canada, January 1989.

- 2 -

(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., and Diena, J., *Highlights of the Provincial Sales Tax Commodity Allocation Project, 1984*, Input-Output Division, Statistics Canada, January 1989. Reprinted from Canadian Economic Observer, May 1989.

(17)
Durand, R., *Aggregation Formulas for Multifactor Productivity*, Input-Output Division, Statistics Canada, June 1989.

(18-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., *Spécification des paramètres du modèle d'entrées-sorties national*, Division des entrées-sorties, Statistique Canada, décembre 1991.

(19-E)
Siddiqi, Y., and 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., and Murty, P.S.K., *Impôts indirects sur les biens et services dans les comptes d'entrées-sorties du Canada, 1984*, Division des entrées-sorties, Statistique Canada, 6 juillet 1989.

(20)
Siddiqi, Y., and 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., and Murty, P.S.K., *Highlights of Commodity Taxes for 1984*, Input-Output Division, Statistics Canada, Canadian Economic Observer, September 1989.

(22)
Siddiqi, Y., and 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., and 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., and Siddiqi, Y., *Government Expenditures on Goods and Services anf Transfer Payments in Canada 1961-1985*, Input-Output Division, Statistics Canada, Reprint from Canadian Economic Observer, May 1990.

(25)
Siddiqi, Y., and 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., and 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., and 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 économique 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-E)
Gill, K., and Larose, M., *Sources and Methods of Estimating Employment by Input-Output Industries for the years 1961 to 1989*, Input-Output Division, Statistics Canada, November 1991, revised February 1993.

(47-F)
Gill, K., et Larose, M., *Sources et Méthodes d'estimation de l'emploi par industries entrées-sorties de 1961 à 1989*, Division des entrées-sorties, Statistique Canada, novembre 1991, révisé février 1993.

(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. Cost/Coût=$500.00

(50)
Messinger, H., *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, M., *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)
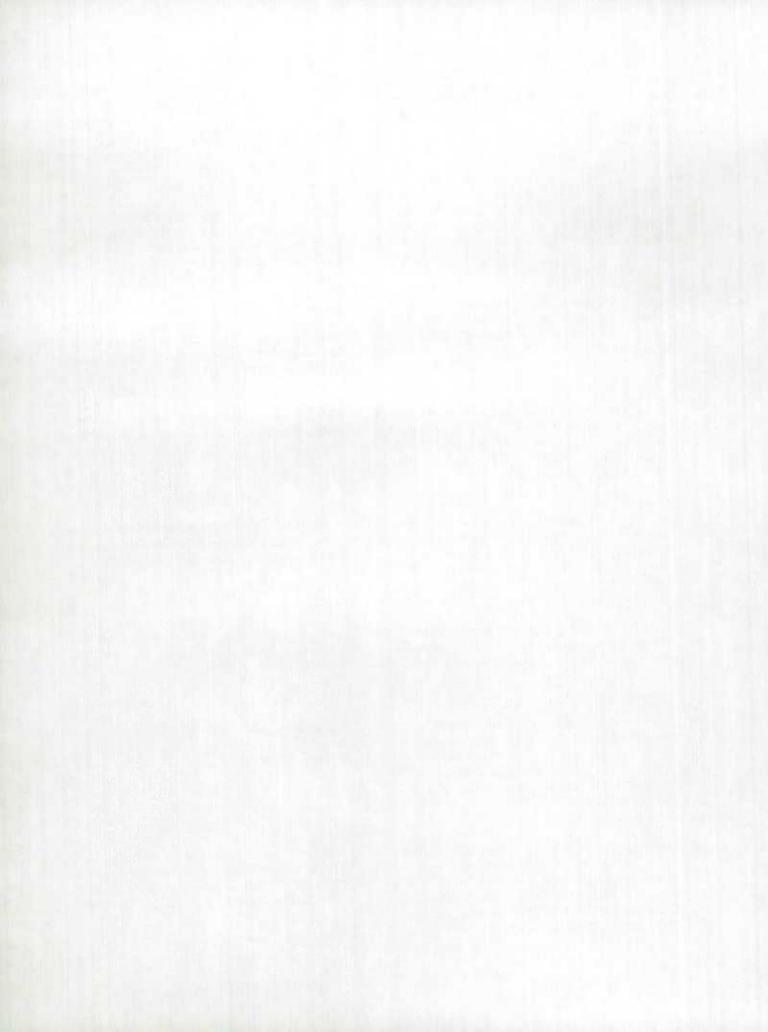Murty, P.S.K., *A Blueprint for the System of Grant Accounts*, Input-Output Division, Statistics Canada, February 1993.

(56)
Murty, P.S.K., *The Need for a System of Grant Accounts*, Input-Output Division, Statistics Canada, March 1993.

(57-E)
Siddiqi, Y., and Salem, M., *Estimating More Timely Input-Output Accounts: A Synthetic Approach*, Input-Output Division, Statistics Canada, March 1993.

(57-F)
Siddiqi, Y., et Salem. M., *Estimaton des comptes d'entrées-sorties dans des délais raisonnables : une méthode synthétique*, Division des entrées-sorties, Statistique Canada, mars 1993

(58-E)
Poole, E., *A Guide to using the Input-Output Model of Statistics Canada*, Input-Output Division, Statistics Canada, June 1993.

(58-F)
Poole, E., *Guide d'utilisation du modèle d'entrées-sorties de Statistique Canada*, Division des entrées-sorties, Statistique Canada, juin 1993, révisé le 18 octobre 1993.

(59)
Murty, P.S.K., *A System of Grant Accounts*, Input-Output Division, Statisics Canada, September 1993.

(60-E)
Allard-Saulnier, M., *Comparability of Multifactor Productivity Estimates in Canada and the United States*, Input-Output Division, Statistics Canada, February 1993.

(60-F)
Allard-Saulnier, M., *Comparabilté des estimations de la productivité multifactorielle au Canada et aux Etats-Unis*, Division des entrées-sorties, Statistique Canada, février 1993.

(61-E)
Maynard, J-P., *Hours Worked: A New Measure of Labour Input for Multifactor Productivity Estimates*, Input-Output Division, Statistics Canada, February 1993.

(61-F)
Maynard, J-P., *Les heures travaillées: une nouvelle mesure de l'entrée de travail pour la productivité multifactorielle*, Division des entrées-sorties, Statistique Canada, février 1993.

(62)
Murty, P.S.K., *A New Approach to Analyze Grants Economy*, Input-Output Division, Statistics Canada, October 21, 1993.
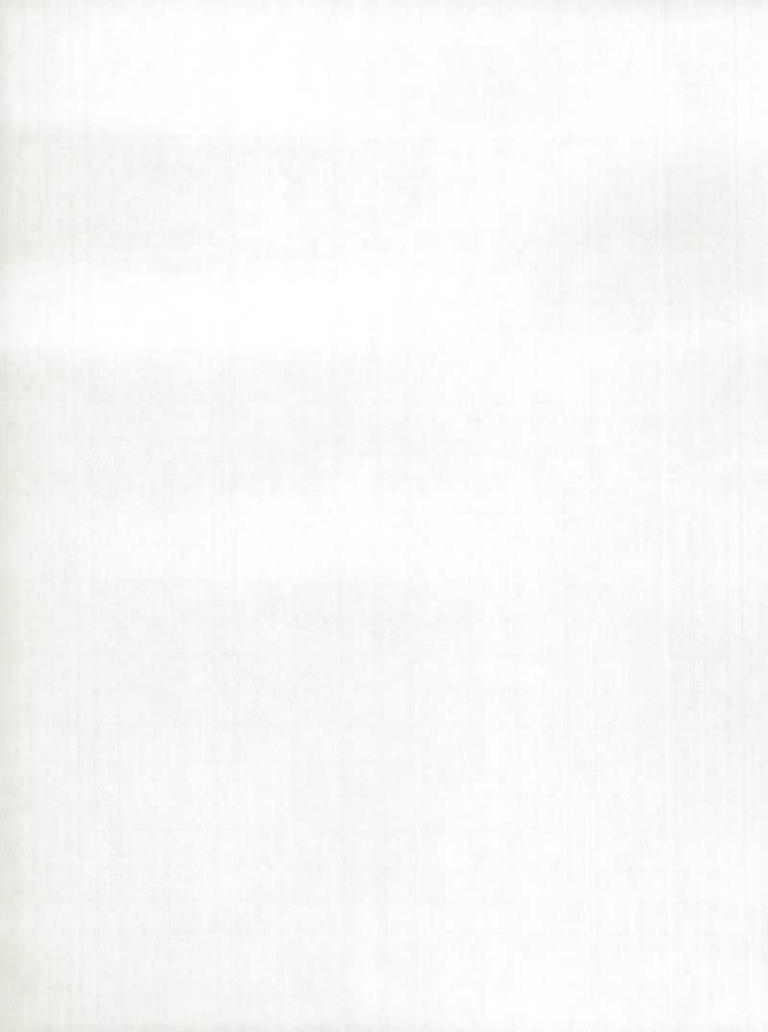
ORDER FORM
Input-Output Division

<table>
<tr><td colspan="2">

MAIL TO:
Publication Sales
Statistics Canada
Ottawa, Ontario, K1A 0T6

FAX TO: (613) 951-1584

A Fax will be treated as an original order. Please do not send confirmation.

(Please print)

Company _____

Department _____

Attention _____

Address _____

City _____ Province _____

Postal Code _____ Tel. _____

</td><td>

METHOD OF PAYMENT

☐ Purchase Order Number *(please enclose)* _____

☐ Payment enclosed $ _____

☐ Bill me later (max. $500)

Charge to my: ☐ MasterCard   ☐ VISA

Account Number [| | | | | | | | | | | | | | | |]

Expiry Date [| | | | |]

Signature _____

Client Reference Number _____

</td></tr>
</table>

Catalogue Number	Title	Frequency/ Release Date	Annual Subscription or Book Price			Qty	Total $
			Canada $	United States US$	Other Countries US$		
15-201	System of National Accounts: The Input-Output Structure of the Canadian Economy, 1987	Annual 02/91	60.00	72.00	84.00		
15-204E	System of National Accounts: Aggregate Productivity Measures, 1989	Annual 07/91	40.00	48.00	56.00		
15-510	System of National Accounts: The Input-Output Structure of the Canadian Economy, 1961-1981	Occasional 01/88	66.00	79.00	79.00		
15-511	System of National Accounts: The Input-Output Structure of the Canadian Economy in Constant Dollars, 1961-1981	Occasional 01/88	66.00	79.00	79.00		

Version française de ce bon de commande disponible sur demande

Statistics Canada   Statistique Canada

Canada

| Catalogue Number | Title | Frequency/ Release Date | Annual Subscription or Book Price | | | Qty | Total $ |
			Canada $	United States US$	Other Countries US$		
	CORPORATE PUBLICATIONS						
11-001E	The Daily	Daily	120.00	144.00	168.00		
11-002E	Infomat	Weekly	125.00	150.00	175.00		
11-008E	Canadian Social Trends	Quarterly	34.00	40.00	48.00		
11-010	Canadian Economic Observer	Monthly	220.00	260.00	310.00		
11-204E	Statistics Canada Catalogue 1990	Annual	13.95	16.70	19.50		

SUBTOTAL

Canadian customers add 7% Goods and Services Tax. GST (7%)

Please note that discounts are applied to the price of the publication and not to the total amount which might include special shipping and handling charges and the GST. GRAND TOTAL

Cheque or money order should be made payable to the Receiver General for Canada/Publications. Canadian clients pay in Canadian funds. Clients from the United States and other countries pay total amount in US funds drawn on a US bank.

Order completed by: Date:

Subscriptions will begin with the next issue.

For faster service   ☎ 1-800-267-6677 ☎   VISA and MasterCard Accounts   PF 0347 05/90

BON DE COMMANDE
Division des entrées-sorties

POSTEZ À :
Vente des publications
Statistique Canada
Ottawa (Ontario) K1A 0T6

(En caractères d'imprimerie s.v.p.)

Entreprise _____

Service _____

À l'attention de _____

Adresse _____

Ville _____ Province _____

Code postal _____ Tél. _____

TÉLÉCOPIEZ À : (613) 951-1584

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

MODALITÉS DE PAIEMENT

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

☐ Paiement inclus _____ $

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

Portez à mon compte : ☐ MasterCard   ☐ VISA

N° de compte [| | | | | | | | | | | | | | | |]

Date d'expiration [| | | | |]

Signature _____

Numéro de référence du client _____

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

This order coupon is available in English upon request