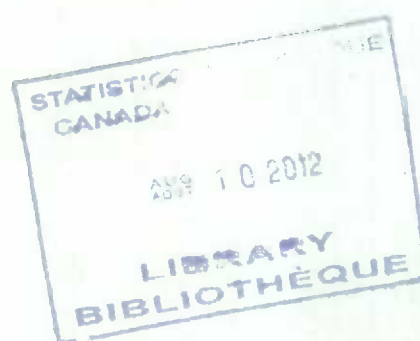


# **The 1997 Historical Revision of the Canadian System of National Accounts**

## **Record of Changes in Classification of Sectors and Transactions, Concepts and Methodology**



**Kishori Lal  
Director General  
System of National Accounts  
Statistics Canada**

**October 1998**



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## Introduction

The 1997 Historical Revision of the Canadian System of National Accounts had several goals:

- (i) To implement the System of National Accounts 1993 (1993 SNA) released under the auspices of five international organizations - EUROSTAT, IMF, OECD, UN, and the World Bank.
- (ii) To implement the revised International Monetary Fund's Balance of Payments Manual, 5th edition, 1993 (BPM-5).
- (iii) To harmonize the standards used for compiling public sector statistics as presented in two separate systems, the Canadian Financial Management System (FMS) and the Canadian System of National Accounts (CSNA), and reconcile both with the public accounts of the federal, provincial and local governments.
- (iv) To rebase the constant price series of the CSNA from 1986 to 1992.

These goals were successfully met by the end of November 1997, as planned, with the release of the CSNA Historical Series. The simultaneous accomplishment of these goals has been a tall order. It has required the development of a process involving the senior staff and professionals from the System of National Accounts Branch to jointly develop and implement a detailed task-oriented plan.

The senior management of the SNA Branch established 10 working committees from all the concerned areas, each to deliberate on one of the 10 major projects and to reach decisions to be ratified by the Steering Committee, consisting of the Director General of the SNA Branch, as chairman, and all the senior managers of the SNA Branch. A complete list of members of the Steering Committee and members of the 10 working committees is provided at the end of this introduction.

More than 50 professionals, mostly from the SNA Branch, were involved in the undertaking. The involvement of so many professionals might appear cumbersome but this mode was deliberately chosen so that the decisions would be "owned" by the very persons responsible for their implementation. Some 150 decisions were made, a number much higher than was expected at the beginning of the exercise. These decisions were issued in August 1996 in a draft report entitled "The 1997 Historical Revision of the Canadian System of National Accounts, Detailed Record of Issues, Discussion Notes and Decisions". This early report was probably the most important one, as it documented all the decisions to be implemented for the 1997 Historical Revision of the Canadian System of National Accounts.

The report was widely distributed internally at Statistics Canada as well as internationally. The *SNA News and Notes* (Number 5, January 1997), jointly issued by European Union, IMF, OECD, United Nations, and World Bank, announced its release and its availability to all our colleagues. The National Accounts directorates of all OECD countries and many other countries requested and received the document. The purpose of such a wide distribution was to share our experience with colleagues of other countries, to make them aware of our examination and resolution of several vexing problems in the 1993 SNA and to learn from them their solutions of similar problems. This, we believe, was a good distribution of labour.

We deeply appreciated the very encouraging comments (quoted below) made by Dr. Ivan P. Fellegi, Chief Statistician of Canada, on the report as well as his gracious recognition of the contributions made by all the members of the various committees:

"This is a landmark achievement in more ways than one. First, the substantive accomplishment speaks for itself: you collectively found a way to implement the 1993 SNA, together with the historical revision cycle. While I am no expert, I do understand the thousands of vexing problems that you must have found a way to solve within our context.

But second, I am really proud of your achievement in finding a way to work together in discovering solutions to problems that, within an integrated system, could only be solved that way. I salute both your inventiveness and perseverance.

Third, I am very pleased that you took the trouble to document your decisions.

I am grateful to all of you."

As we started implementing the decisions, the need for some changes in methodology, valuation and presentation became evident. Some decisions could not be implemented due to lack of source data, shortage of financial and personnel resources or time constraints. In the interest of transparency and integrity of the statistics, it was decided to fully record and explain all changes. Documentation is one area that is regrettably left undone at most institutions and, in my judgement, this is not a wise thing. I read a report some time ago in which I noted an African saying: "When an old citizen dies, a library is lost". How elegantly put!

Four documents are completed relating to the changes made in this Historical Revision. The first, the present one, "The 1997 Historical Revision of the Canadian System of National Accounts, Record of Changes in Classification of Sectors and Transactions, Concepts and Methodology", elaborates on the changes, over one hundred in all, made in the accounts. It updates the earlier report issued in August 1996 in several ways: decisions which did not involve any change in the accounts were pruned out; several new issues were added and many decisions were rewritten.

The second report, entitled "The 1997 Historical Revision of the Canadian System of National Accounts, Current Price Gross Domestic Product, 1961-93, A Statistical Representation from the Old to the New", presents the changes made to one of the most important series, the current price GDP. It includes 13 tables, one for each of the following topics:

- Personal Expenditure on Consumer Goods and Services;
- Government Current Expenditure on Goods and Services;
- Gross Fixed Capital Formation, Residential Structures;
- Gross Fixed Capital formation, Non-Residential Structures;
- Gross Fixed Capital Formation, Machinery and Equipment;
- Exports and Imports of Goods and Services;
- Wages, Salaries and Supplementary Labour Income;
- Net Income of Unincorporated Business;
- Indirect Taxes;
- Subsidies;
- Current Price GDP Expenditure;
- Current Price GDP Income;
- GDP Changes, Significant Items.

The third report, entitled "The 1997 Historical Revision of the Canadian System of National Accounts, Industry, Final Demand and Commodity Classification Systems", deals with the industry classification used in the Input-Output tables, the provincial GDP and the monthly GDP by industry; the commodity classification used in the Input-Output tables and the final demand classification used in the Income and Expenditure Accounts and the Input-Output tables. This report on classification systems is crucial for inter-temporal comparisons. To develop the most detailed and consistent time series requires a careful review of the various versions of the industry and commodity classifications in order to adopt common nomenclatures applicable to a long period, in the case of Canada from 1961 to date. It gives great pleasure to report that at the link level for the entire historical period, we have delineated 167 industries, 122 final demand categories and 476 commodities, an enviable degree of detail anywhere in the world.

The fourth report, entitled "Remaining Differences between the 1997 Canadian System of National Accounts and the 1993 International System of National Accounts", examines the 1997 CSNA and highlights the remaining differences from the 1993 SNA, thus providing a better understanding of the Canadian System vis-à-vis that of other countries. Our occasional departures from the 1993 SNA guidelines are primarily prompted by pragmatic considerations, such as institutional structure, statistical data sources, availability of resources and their cost-effective use. It would be very helpful if other countries would also prepare a document similar to this one, comparing their system of national accounts with the 1993 SNA. This would provide material for the future version of the international SNA.



The four reports are the first set of documents related to the 1997 CSNA Historical Revision. We are also planning to produce several others during the next two years:

- 1) A report explaining the remaining differences between the international standards for Balance of Payments and the current Canadian practices.
- 2) A text proposing changes to the 1993 SNA to be reflected in its future version. This will partly borrow from previous reports, but also will probe into certain issues still unresolved or whose resolution is deemed to be unsatisfactory in the 1993 SNA.
- 3) Subject-specific sources and methods documents, to be prepared by the concerned Divisions of the SNA Branch.

The first four reports, noted above, are available upon request from my office.

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## TABLE OF CONTENTS

1.	Public Sector Universe .....	13
1.1	Structure of the Government Sector .....	13
1.2	Universities .....	14
1.3	Colleges .....	14
1.4	Newfoundland School Boards .....	15
1.5	Hospitals .....	15
1.6	Residential Care Facilities .....	16
1.7	Other Health and Social Service Institutions .....	16
1.8	Deposit Insurance Corporations and Agencies .....	17
1.9	Housing Authorities .....	18
1.10	Universe Changes .....	20
2.	Harmonization of Classification of Public Sector Transactions .....	25
2.1	Harmonization of Rules and Guidelines .....	25
2.2	Tax Credits .....	25
2.3	Profits of Government-Owned Liquor Boards and Gaming Activities .....	27
2.4	Licences, Privileges and Permits .....	28
2.5	Premiums Paid to Deposit Insurance Corporations .....	29
2.6	Fines, Penalties and Interest on Overdue Accounts .....	29
2.7	Payments in Respect of Losses of Government Business Enterprises .....	30
2.8	Forgiveness and Write-off of Loans .....	31
2.9	Transfers from Provincial to Federal Government .....	31
2.10	Revenues Netted Against Expenditure .....	32
2.11	Royalties .....	32
2.12	Supplementary Labour Income (SLI) .....	33
2.13	Gain (or Loss) on Foreign Exchange .....	34
2.14	Gain (or Loss) on Sale of Financial Investments .....	34
2.15	Supplementary Period Adjustments - Federal Government .....	35
2.16	Seigniorage .....	35
2.17	Federal Consolidated Special Purpose Accounts .....	36
2.18	Adjustment to Income Taxes of Life Insurance Companies .....	37
2.19	Québec Youth Allowances .....	38
2.20	Federal Payment to Quebec for the Purchase of Frigates .....	38
2.21	Adjustments to Employment Insurance Premiums .....	39
2.22	GST Low Income Refundable Tax Credits .....	39
2.23	Canadian Dairy Commission .....	40
2.24	Doubtful Taxes in Québec .....	40
2.25	Consumption Taxes Levied and Paid by the Same Government .....	40
2.26	Alberta Royalty Tax Credit .....	41
2.27	Refundable Credit for Losses on Mining Operation in Québec .....	41
2.28	Rent Supplements Paid by Provincial Housing Authorities to Landlords .....	42



2.29	Lot Levies .....	42
2.30	Local Capital Transfers .....	43
2.31	Miscellaneous Revenue - Local Government .....	43
2.32	Sales of Goods and Services to Other Governments .....	43
2.33	Pension Adjustments, British Columbia .....	44
2.34	Property Tax Credits – British Columbia, Alberta and Manitoba .....	44
2.35	Education Sales to Other Levels of Government – Quebec .....	44
2.36	Grants in Lieu of Taxes .....	45
2.37	Allowances for Losses on Government Loans .....	45
2.38	Liabilities of the Federal Government in Respect of Losses of Government Business Enterprises .....	46
2.39	Government Liabilities in Respect of Employee Pension Plans: Autonomous Plans with Invested Assets .....	47
2.40	Government Liabilities in Respect of Employee Pension Plans: Non-Autonomous Plans without Invested Assets .....	47
2.41	Treasury Bills .....	48
2.42	Notes Payable to the IMF, Outstanding Cheques and Bank Overdrafts .....	49
2.43	Foreign Subsidiaries of Government Business Enterprises .....	49
2.44	Individual Funds of the Caisse de dépôt et de Placement du Québec .....	50
2.45	Manitoba Telephone Investments for its Pension Obligations .....	51
3.	Labour Income .....	52
3.1	Retirement Allowances .....	52
3.2	Employer Payroll Tax – Ontario and Quebec .....	52
3.3	Workers' Compensation – Hospital and Medical Expenditures .....	52
3.4	Workers' Compensation – Unfunded Liabilities .....	53
3.5	Interest on Overdue Employers' Contributions to Pensions .....	53
3.6	Fishing – Adjustment for Undercoverage .....	54
3.7	Insurance Agents' Commissions – Adjustment for Undercoverage .....	54
3.8	Tips – Adjustment for Undercoverage .....	55
3.9	Provincial Distribution of Wages and Salaries .....	55
3.10	Canadian Employees in Foreign Embassies and Consulates .....	56
3.11	Insurable Earnings of Status Indians .....	56
4.	Capital Formation .....	57
4.1	Transfer Costs on the Sale of Existing Dwellings .....	57
4.2	National Defence Purchases of Non-Military Equipment and Structures .....	57
4.3	Capital Items Charged to Operating Expenses .....	58
4.4	Expenditures on Mineral Exploration .....	59
4.5	Progress Payments for Machinery and Equipment .....	59
4.6	Financial Leasing .....	60
4.7	Petroleum Incentive Payments Program .....	61
4.8	Capital Consumption in the Government Sector .....	62



5.	International Trade .....	63
5.1	Point of Valuation of Trade in Goods .....	63
5.2	Progress Payments on Imported Capital Goods .....	63
5.3	Trade in Goods for Processing .....	64
5.4	Reconfiguration of the Travel Account .....	64
5.5	New Breakdown of Commercial Services .....	65
6.	Household Consumption Expenditure .....	67
6.1	Classification of Individual Consumption by Purpose (COICOP) .....	67
6.2	Leasing in the Household Sector .....	67
7.	Financial Services and Insurance .....	69
7.1	Financial Intermediation Services Indirectly Measured (FISIM) – Allocation .....	69
7.2	FISIM – Reference Rates .....	70
7.3	FISIM – International Trade .....	71
7.4	FISIM – Own Funds .....	71
7.5	FISIM – Consumer Loan Companies .....	72
7.6	FISIM – Bank of Canada .....	73
7.7	Output of Insurance Industries .....	74
8.	Input-Output – Classifications and Valuation .....	75
8.1	Industry Classification .....	75
8.2	Resource Royalties Industry .....	76
8.3	Presentation of Non-Market Producers .....	76
8.4	Commodity Classification .....	77
8.5	Valuation of Imports and Exports .....	78
9.	Deflation .....	80
9.1	Rebasing of GDP from 1986 to 1992 prices .....	80
9.2	Output of Non-Market Services – Education .....	81
9.3	Quality Adjustment of the Volume of Wheat .....	81
10.	Financial Flows and Balance Sheets .....	83
10.1	Seasonally Adjusted Financial Flow Accounts .....	83
10.2	Other Changes in Asset Account .....	83
10.3	Subsoil Assets .....	84
10.4	Timber Assets .....	84
10.5	Monetization of Gold .....	85
10.6	Leasing .....	86
10.7	Asset-backed Securities .....	88



## 1. Public Sector Universe

### 1.1 Structure of the Government Sector

**Issue:** Should we follow the 1993 SNA to delineate the structure of the Government sector and organize it such that for both the Canadian Financial Management System (FMS) and the Canadian System of National Accounts (CSNA), the same set of institutional units forms a sector, a sub-sector or a component?

**Pre-Revision Treatment:** The universe for the Government sector was not the same in the FMS and the CSNA. The organization of the sector also differed between these systems. Neither the FMS nor the CSNA fully covered the Government sector.

**Discussion Notes:** It was agreed that a common universe was essential both for operational reasons and for improving the integration of the data sets. It would facilitate the classification of government expenditure on a functional basis in the CSNA. The existing differences have caused considerable additional work in the various Divisions of the SNA Branch.

The 1993 SNA proposes two approaches for sub-sectoring the Government sector. One approach is to have a separate sub-sector for social security funds. The other is to associate social security funds with the appropriate level of government. It was felt that having a distinct sub-sector for social security schemes, which would show separately the Canada Pension Plan (CPP) and the Quebec Pension Plan (QPP), was the most appropriate choice for Canada.

The 1993 SNA does not delineate components below the sub-sectors of government (Federal, Provincial, Local and Social Security Funds), but it was felt important to maintain greater detail in both the CSNA and the FMS.

In both systems, the components estimated separately under Federal Government are General Government and Non-Autonomous Pension Plans. However, Non-Autonomous Pension Plans should not be shown separately in the CSNA until other OECD countries implement the 1993 SNA.

There are four components of the Provincial/Territorial Government sub-sector:

- General Government
- Non-Autonomous Pension Plans
- Universities and Colleges
- Health and Social Services Institutions, which include hospitals as well as other health and social service institutions.

As in the case of Federal Government, Non-Autonomous Pension Plans should not be shown separately in the CSNA until other OECD countries implement the 1993 SNA.

The Local Government sub-sector has two components, General Government and School Boards.

**Change:** A new structure of the Government sector, which satisfies the 1993 SNA guidelines and harmonizes the FMS and the CSNA universes, has now been put in place. The only exception is that the decision to have a separate Non-Autonomous Employee Pension Plans sub-sector in the CSNA is delayed until other OECD countries implement the 1993 SNA.

## 1.2 Universities

**Issue:** a. Should universities be transferred to the Government sector?  
b. If so, should they be transferred as a block?

**Pre-Revision Treatment:** Universities were not part of the Government sector in the CSNA or the FMS. They formed part of the household sector in the CSNA, as they were considered 'associations of individuals' serving the community.

**Discussion Notes:** The 1993 SNA recommends that institutions mainly financed by government be classified to that sector. The majority of universities, 88 out of 143, in Canada continue to be mainly financed by governments. These universities account for over 98% of total revenues of universities. The remaining ones are mostly theological universities attached to a larger parent university. The transfer of universities to the Government sector thus seems warranted.

It was also recommended that, for analytical ease, all universities be placed in the same component. In Canada, the universities that are not mainly financed by government account for a very small proportion of the activity. Public Institutions Division should monitor them annually so that this recommendation could be reexamined if the situation changes in future.

**Change:** All universities have now been moved from the household sector to a component of the Provincial/Territorial Government sub-sector. For analytical ease, all universities have been placed in the same component.

## 1.3 Colleges

**Issue:** a. Should non-profit colleges be a separate component of the Government sector?  
b. Should all these colleges be in the same component?  
c. Should all other private colleges remain in the business sector?

**Pre-Revision Treatment:** All non-profit colleges were in the Provincial Government sub-sector in both the FMS and the CSNA. Other private colleges were in the business sector.



**Discussion Notes:** It was considered important to classify non-profit colleges as a separate component of the Provincial Government sub-sector to provide an estimate of total expenditures of post-secondary education. There are only a handful of non-profit colleges that are not mainly financed by provincial governments and their contribution to total expenditures is less than 2%. It is sometimes argued that institutions not controlled by government, even if the latter provides most of their financing, should not be classified in the Government sector; some 26 colleges in Quebec fall in this category. Specific control information for the other provinces is not available. The notion of control is always somewhat nebulous. Thus the fact of being mainly financed by the government was considered a sufficient criterion to classify an institutional unit in the Government sector.

All colleges that are separate institutional units should be in the same component for analytical ease since those not mainly financed by government account for a very small proportion of the activity. Public Institutions Division should monitor them annually so that this recommendation could be reexamined if the situation changes in future. All private (other than non-profit) colleges should remain in the business sector.

**Change:** Non-profit colleges have now been placed in a separate component of the Provincial Government sub-sector. For statistical quality reasons, particularly of quarterly data, colleges and universities are combined into a single component for dissemination purposes. For analytical ease, all non-profit colleges have been placed in the same component. All other private colleges remain in the business sector.

#### 1.4 Newfoundland School Boards

**Issue:** Should Newfoundland school boards be transferred to the Government sector?

**Pre-Revision Treatment:** These school boards were part of the household sector in the CSNA.

**Discussion Notes:** School boards in Newfoundland continue to be separate institutional units and are mainly financed and increasingly controlled by the provincial government. Following a referendum in Newfoundland in September 1997, the Constitution of Canada has been amended to give the provincial government more control over the school boards.

**Change:** School boards in Newfoundland have now been moved from the household sector to the school board component of the Local Government sub-sector.

#### 1.5 Hospitals

**Issue:** Should all non-profit hospitals, mainly financed by government, be placed in a component of the Provincial Government sub-sector?

**Pre-Revision Treatment:** Hospitals formed a distinct sub-sector of Government in both the Income and Expenditure Accounts and the Input-Output tables. For international reporting purposes, however, the hospitals were combined with the Local Government sub-sector in the Income and Expenditure Accounts. The so-called private hospitals were classified to the business sector.

**Discussion Notes:** The 1993 SNA recommends that all non-profit institutional units mainly financed by government be classified to the Government sector. As hospitals are mainly financed by provincial governments, it was recommended to move the existing Hospitals sub-sector to a component of the Provincial Government sub-sector in the Income and Expenditure Accounts. The so-called private hospitals were actually non-profit organizations mainly financed by provincial governments that were wrongly allocated to the business sector.

**Change:** All non-profit hospitals (public and private) mainly financed by government have now been transferred to the Provincial Government sub-sector.

## 1.6 Residential Care Facilities

**Issue:** Should all non-profit residential care facilities (RCFs) be allocated to the Government sector?

**Pre-Revision treatment:** Residential care facilities were allocated to a sector based on the 'ownership' variable on the RCF survey. Most of them were in the household sector, with others in the government or the business sector.

**Discussion Notes:** There are a significant number of proprietary RCFs that must remain in the business sector. The remaining RCFs are non-profit organizations with the vast majority mainly financed by government. The high percentage of funding from provincial governments plus the regulatory authority the latter exercise on these entities points to their allocation to the Provincial Government sub-sector. It is sometimes difficult to draw the line between residential care facilities and hospitals. Having all non-profit residential care facilities in the Provincial Government sub-sector ensures that any shift between these two components would have no impact on the sub-sector data. However, RCFs are a very heterogeneous group with many providing very little in terms of medical or social assistance other than housing.

**Change:** All non-profit residential care facilities now form a sub-component of the Provincial Government sub-sector. For statistical quality reasons, particularly of quarterly data, residential care facilities are combined with other sub-components for dissemination purposes. The proprietary RCFs remain in the business sector.

## 1.7 Other Health and Social Service Institutions

**Issue:** Should there be a separate sub-component for other health and social service institutions within the Provincial Government sub-sector?

**Pre-Revision Treatment:** These institutions were not separately identified in the Provincial Government sub-sector.

**Discussion Notes:** There are several sub-components of the Health and Social Service Institutions component. The most important ones are hospitals and residential care facilities. Remaining institutions should be classified to another sub-component, 'Other Health and Social Service Institutions, n.e.s'. There are a number of such health and social service agencies in Quebec that should be classified in this sub-component.

**Change:** A separate sub-component has been created for other health and social services within the Provincial Government sub-sector. For statistical quality reasons, particularly of quarterly data, this sub-component is combined with other sub-components for dissemination purposes.

## 1.8 Deposit Insurance Corporations and Agencies

**Issue:** Should all deposit insurance corporations and agencies be allocated to the Government sector?

**Pre-Revision Treatment:** There are several provincial deposit insurance corporations, and a federal one. Some were classified as business enterprises, while others were classified as special funds of government.

**Discussion Notes:** Two aspects of these agencies were examined, their regulatory nature and their financing. Financial institutions must join these agencies, purchase deposit insurance and must do so from the specified agency. The examination of the records of deposit insurance corporations also revealed that their capital was often insufficient to meet their obligations when financial institutions failed. Thus governments have had to provide them with additional funds so they could pay the claims of the financial institutions. This also indicates that they are not truly operating as businesses.

**Change:** All the deposit insurance corporations and agencies have now been transferred to the Government sector. See also Item 2.5.

## 1.9 Housing Authorities

**Issue:** There are a number of entities that are commonly referred to as housing authorities. These entities finance, construct or manage buildings that primarily provide housing for persons with low incomes. To what sector should they be classified?

**Pre-Revision Treatment:**

### Federal Housing Authority

The Canada Mortgage and Housing Corporation (CMHC) is the only federal entity in this group. It was classified as a Government Business Enterprise (GBE).



### Provincial Housing Authorities

The majority were treated as GBEs. In the province of Quebec, the housing authority was a special fund of the government. In Nova Scotia, it was part of the Housing Ministry. In BC, there were two entities, one a special fund of the government and the other a GBE.

### Local Housing Authorities

Some of these entities were in Local Government, while the remainder were in the Business Sector. There were 18 entities classified to the Local Government sub-sector in both the FMS and the CSNA. These were entities that were linked directly to municipal governments. The 'Offices municipaux d'habitation' (OMHs) in Quebec were also classified to Local Government in the FMS, but not in the CSNA.

### **Discussion Notes:**

#### Federal Housing Authority

The financial statement of CMHC includes three accounts: the Minister's Account, the Corporate Account and the Administered Funds Account. The Minister's Account was treated as part of departmental expenditures, for which CMHC is only an agent. The remaining two covered the mortgage lending and mortgage insurance activities of CMHC. These accounts generally showed a positive net income. This entity (without the Minister's Account) had been classified as a GBE and it was recommended that it remain so, as the CMHC fees for mortgage lending and mortgage insurance services are comparable to those of other market-oriented institutions.

#### Provincial and Local Authorities

The Public Institutions Division has had access to financial statements of all of the provincial entities, but financial statements of local entities have proven much more difficult to obtain. From the information available, all provincial and local entities should be classified as non-profit organizations. As such, they may be in any of the three sectors of the economy - non-profit organizations serving households, government or business. Looking at the sources of revenue for these entities, we found that rents accounted for less than 50% of the revenues of all provincial entities operating housing units. In many cases, rental income covered less than 30% of the expenditures. Given that governments provide most of the funding for these agencies and set regulations governing their day-to-day operations, it was recommended that they be classified to the Government sector.

A review of the mandate of these entities made it quite clear that they have a role in the general delivery of social assistance. In fact, they are largely an alternate delivery vehicle for social programs rather than a real competitor to private housing. The increasing integration of health and social welfare delivery was likely to further blur the



line between social housing and other social assistance programs. In several provinces, the provincial housing authority was active in supporting not only housing for the poor, but also specialized housing that would fall in the category of residential care facilities, such as senior citizen homes, nursing homes and shelters for women and children.

### Provincial Government Housing Authorities

These entities, listed below, should be classified as special funds of provincial governments. Most of them were classified as GBEs.

1. Newfoundland and Labrador Housing Corporation
2. Prince Edward Island Housing Corporation
  - and its 9 Local Housing Authorities
3. Nova Scotia Housing Development Fund (already a Special Fund - SF)
  - and its 18 Regional Authorities
4. New Brunswick Housing Corporation
5. Société d'Habitation du Québec (already a SF)
6. Ontario Housing Corporation
  - and its 54 Local Housing Authorities
7. Manitoba Housing and Renewal Corporation
  - Manitoba Municipal Housing Authority (agent)
8. Saskatchewan Housing Corporation
  - and its 271 Local Housing Authorities
9. Alberta Social Housing (formerly Alberta Mortgage and Housing Corp.)
10. Provincial Rental Housing Corporation (BC)
11. BC Housing Management Commission
12. Yukon Housing Corporation
  - Whitehorse Housing Authority (agent)
13. NWT Housing Corporation
  - and its 47 Local Housing Organizations

### Local Housing Authorities

For most of these entities, there was very little data available. Those entities that are part of a municipal government should belong to Local Government. Other local housing organizations that are non-profit institutional units mainly funded by government should also be part of Local Government, in the same way as other boards and commissions, etc. Finally, there are co-ops and other non-profit agencies which might be part of the non-profit institutions serving household sector or the Government sector, but for which we lacked the data to differentiate.

It was proposed that the 'Offices municipaux d'habitation' (OMHs) in Quebec and other institutions identified as part of a municipality (see list below) remain part of the Local Government sub-sector. The inclusion of OMHs in Quebec would be a change for the CSNA:

1. St. John's Non-Profit Housing
2. Saint John Non-Profit Housing
3. Offices municipaux d'habitation (653 entities)
4. Metro Toronto Housing Corporation
5. Brantford Non-Profit Housing
6. Hamilton Non-Profit Housing
7. Ottawa Non-Profit Housing
8. Regional Municipality of Durham Non-Profit Housing
9. Regional Municipality of Peel Non-Profit Housing
10. Thunder Bay Non-Profit Housing
11. City of Toronto Non-Profit Housing
12. Windsor Non-Profit Housing
13. Yorkton Housing Corporation
14. Edmonton Non-Profit Housing
15. Calgary Non-Profit Housing
16. Capital Region Housing Corporation (Victoria)
17. City of Vancouver Housing Corporation
18. Greater Vancouver Public Housing Corporation

#### Other Housing Authorities

It was proposed to continue classifying all other local organizations to the business sector, in the absence of adequate data.

**Change:** i) All provincial government housing authorities have now been moved from the business sector to the Provincial Government sub-sector. ii) In the CSNA, Quebec's OMHs (653 entities) have now been moved from the business sector to the Local Government sub-sector; all local housing authorities identified as part of a municipality have remained in Local Government in the FMS; iii) In the absence of data, other local housing authorities remain in the business sector.

### **1.10 Universe Changes**

**Issue:** How far back should the universe changes be made?

**Discussion Notes:** Both the CSNA and the FMS must produce time series on a consistent basis. This requires that the institutional units making up a sector of the economy must be consistently defined. But there is always a tussle between the need for long time series and the cost of producing them. Common sense must prevail. It was the collective judgement that it would not be cost effective to go back prior to 1961 for each institution that has changed sector.

The attached table, Universe Changes in the Public Sector of Canada, lists all the universe changes made to implement the 1993 SNA guidelines and harmonize the FMS and the CSNA universes. There are three types of change:

- 1) Transfer of an entire class of institutional units from one sector to another, such as universities which go from the household sector to the Government sector. These changes apply equally in the FMS and the CSNA.
- 2) Transfer of individual institutional units from one sector to another. These instances are listed by level of government (federal and provincial). Several new entities are also listed under the two levels of government. These changes apply equally in the FMS and the CSNA.
- 3) Changes to the Local Government sub-sector. Several individual institutional units are transferred to the new sub-sector. This applies only in the CSNA, as these units were already classified properly in the FMS.

**Change:** The effective date for change is the inception date of the institutional unit or 1961, whichever comes later. In incorporating the changes, every effort has been made to use the accounting records of the institutional units.

UNIVERSE CHANGES IN THE PUBLIC SECTOR OF CANADA			
ENTITIES	Previous Sector	New Sector	Effective Date for Change
<b>CLASS DECISIONS</b>			
Newfoundland School Boards.....X	Households	Government	1961
Non-Profit Residential Care Facilities .....X	Households	Government	1961
Universities .....X	Households	Government	1961
Proprietary Hospitals .....X	Business	Government	1961
<b>ENTITY DECISIONS</b>			
<b>FEDERAL</b>			
Atomic Energy of Canada.....	Government	GBE	1952 <sup>1</sup>
Canada Eldor Inc. ....	GBE	Government	1988
Canada Deposit Insurance Corporation .....	GBE	Government	1967
Canada Place Corporation.....	Government	GBE	1987
Canadian Broadcasting Corporation.....	GBE	Government	1961
Canadian Commercial Corporation.....	GBE	Government	1946 <sup>1</sup>
Cape Breton Development Corporation.....	Government	GBE	1967
Jacques Cartier and Champlain Bridges Inc.....	GBE	Government	1978
<i>New Entity</i>			
Enterprise Cape Breton Corporation .....		Government	1988
<b>PROVINCIAL</b>			
<b>NEWFOUNDLAND</b>			
Newfoundland and Labrador Housing Corporation.....	GBE	Government	1967
Newfoundland Cancer Treatment and Research Foundation .....	Business	Government	1971
<b>PRINCE EDWARD ISLAND</b>			
Prince Edward Island Housing Corporation .....	GBE	Government	1969
- Local Housing Authorities (9) .....	GBE	Government	1969
<b>NOVA SCOTIA</b>			
Nova Scotia Housing Development Corporation.....	Government	No change	1981
- Regional Housing Authorities (18) .....	Business	Government	1981
Trade Centre Limited .....	Government	GBE	1984
<b>NEW BRUNSWICK</b>			
New Brunswick Housing Corporation.....	GBE	Government	1967
New Brunswick Research and Productivity Council.....	Government	GBE	1981
Provincial Holdings .....	GBE	Government	1973

X = Not implemented for Assets and Liabilities (FMS)

<sup>1</sup> Date of change in the Business Register. Data revisions back to 1961 only.



## UNIVERSE CHANGES IN THE PUBLIC SECTOR OF CANADA

ENTITIES	Previous Sector	New Sector	Effective Date for Change
<b>QUEBEC</b>			
Société du Palais des congrès de Montréal .....	Government	GBE	1983
Société québécoise des transports .....	GBE	Government	1988
Société québécoise d'initiatives agro-alimentaires (SOQUIA) .....	Government	GBE	1975
- Société québécoise des pêches ( <i>consolidated by SOQUIA</i> ) .....			
Société parc-autos du Québec métropolitain .....	Government	GBE	1980
<u>New Entity</u>			
Société du Centre des congrès de Québec .....	.....	GBE	1993
<b>ONTARIO</b>			
Metropolitan Toronto Convention Centre Corporation .....	Government	GBE	1984
Ontario Housing Corporation .....	GBE	Government	1964
- Local Housing Authorities (54) .....	GBE	Government	1964
Ontario Place Corporation .....	Government	GBE	1971
ORTECH Corporation (Ontario) .....	Government	GBE	1989
Ottawa Congress Centre .....	Government	GBE	1984
Ontario Cancer Treatment and Research Foundation .....	Households	Government	1961
Province of Ontario Savings Office .....	GBE	Government	1961
<u>New Entities</u>			
Ontario Casino Corporation .....	.....	GBE	1994
Ontario Clean Water Agency .....	.....	Government	1993
Ontario Financing Authority .....	.....	Government	1993
Ontario Realty Corporation .....	.....	Government	1993
Ontario Training and Adjustment Board .....	.....	Government	1993
Ontario Transportation Capital Corporation .....	.....	Government	1993
<b>MANITOBA</b>			
Manitoba Centennial Centre Corporation .....	Government	GBE	1968
Manitoba Housing and Renewal Corporation .....	GBE	Government	1967
- Manitoba Municipal Housing Authority .....	GBE	Government	1967
Manitoba Lotteries Corporation .....	Government	GBE	1984
North Portage Development Corporation .....	Government	GBE	1983
Manitoba Cancer Treatment and Research Foundation .....	Business	Government	1980
<b>SASKATCHEWAN</b>			
Sask Sport Inc. ....	Government	Business	1970
- Sask Sport Distribution Inc. ....	Government	Business	1970
- Administration Centres for Sports, Culture and Recreation (1989) Inc. ....	Government	Business	1989
- Western Canada Lottery – Saskatchewan Division Inc. ....	Government	Business	1970
Saskatchewan Housing Corporation .....	GBE	Government	1974
- Local Housing Authorities (271) .....	GBE	Government	1974
Saskatchewan Research Council .....	Government	GBE	1988

UNIVERSE CHANGES IN THE PUBLIC SECTOR OF CANADA			
ENTITIES	Previous Sector	New Sector	Effective Date for Change
<i>New Entity</i> Saskatchewan Lotteries Trust Fund for Sport, Culture and Recreation .....	.....	Government	1991
<b>ALBERTA</b> Alberta Social Housing .....	GBE	Government	1967
<i>New Entities</i> ARCA Investments Inc. ....	.....	Business	1984
Pension Plan Administration Fund .....	.....	Government	1992
<b>BRITISH COLUMBIA</b> B.C. Housing Management Commission .....	GBE	Government	1967
B.C. Pavilion Corporation .....	Government	GBE	1984
<i>New Entity</i> B.C. Transportation Financing Authority .....	.....	Government	1993
<b>YUKON TERRITORY</b> Yukon Housing Corporation .....	GBE	Government	1972
- Whitehorse Housing Authority .....	GBE	Government	1982
<b>NORTHWEST TERRITORIES</b> Northwest Territories Housing Corporation .....	GBE	Government	1974
- Local Housing Organizations (47) .....	GBE	Government	1974
<b>The following changes apply to the System of National Accounts only.</b>			
<b>LOCAL</b>			
<b>QUEBEC</b> Offices municipaux d'habitation ..... X	Business	Government	1968
<b>NORTHWEST TERRITORIES</b> Yellowknife Education Districts 1 and 2 .....	Prov Govt. Prov Govt.	School Brds School Brds	1989 1995
Sir John Franklin Territorial High School .....			

X = Not implemented for Assets and Liabilities (FMS)

## 2. Harmonization of Classification of Public Sector Transactions

### 2.1 Harmonization of Rules and Guidelines

**Issue:** Should there be a harmonization of the rules and guidelines in the two systems, FMS and CSNA, for compiling Public Sector financial statistics?

**Pre-Revision Treatment:** Identical transactions (as reported in financial statements and public accounts of the various governments) were sometimes recorded differently in the two systems: classifications were different and so were conventions on the recording of transactions on a gross or net basis. This was confusing to the users.

**Discussion Notes:** In the 1996 Budget Plan of Canada, as submitted to Parliament on March 6, 1996, it was noted: "There are currently three systems of government financial accounting - each serving a different purpose. A working group has been set up - on the Auditor General's recommendation - charged with the task of generating a better understanding of, and access to, these. Progress is being made in reducing the differences in concepts, where possible. The revision to the System of National Accounts in 1997 will reduce some of the current discrepancies between the measure of the deficit on a National Accounts and a Public Accounts basis. In addition, the Financial Management System - which gathers information on all three levels of government using a common framework - is being revised to reduce differences with the National Accounts definitions" (page 119).

**Change:** By and large, both the FMS and the CSNA have now adopted the same rules for classifying and recording transactions. Any exception to the rules is fully spelled out and approved by the senior management of the SNA Branch. Every effort is made to harmonize the universe, the classification criteria and the valuation principles.

### 2.2 Tax Credits

**Issue:** Should income taxes be recorded on a net basis, after deduction of tax credits, or should they be recorded on a gross basis and the tax credits treated as an expenditure?

**Pre-Revision Treatment:** Many more tax credits were treated as expenditure in the FMS than in the CSNA.

**Discussion Notes:** A distinction was made between refundable tax credits, which have value even for persons and businesses without taxable income, and non-refundable tax credits, that only have value in the context of the tax system by reducing tax liability. As well, the refundable tax credits actually paid out are reported in financial statements and public accounts. Information on refundable tax credits deducted from tax liability and on non-refundable tax credits is much less readily available.

Refundable tax credits could be considered as expenditure programs being delivered via the tax administration. Further, the recording of such programs as expenditure would improve inter-provincial comparability, as they can be delivered through direct payments or the tax system, depending on the jurisdiction.

One must be careful in how the term 'refundable' is used, particularly with respect to the corporate tax, as it may really refer to the ability to carry forward or backward credits which may not be truly refundable. Some tax credits may be refunds and should be treated as such; for an example, see Item 2.26, Alberta Royalty Tax Credit. The treatment of each refundable tax credit is shown in the table below.

## REFUNDABLE TAXES

LEVEL	NAME	\$ Millions in 1993/94	Previous Treatment of Corresponding Tax	
			FMS	SNA
<b><u>Personal Income Tax</u></b>				
<b><i>Federal</i></b>				
	GST Low Income Tax Credit	2,685.00	Gross	Gross
	Child Tax Credit (Gone in 1994/95)	1,612.00	Gross	Net
<b><i>Provincial</i></b>				
NS	Home Ownership Plan	0.20	Gross	Net
QC	Real Property	263.00	Gross	Net
	Sales Tax	188.70	Gross	Net
	Adults Who Lodge Their Direct Ascendants	8.30	Gross	Net
ON	Property and Sales Tax	879.00	Gross	Net
	Ontario Home Ownership Savings Plan	25.50	Gross	Net
MB	Property	77.20	Gross	Net
	Cost of Living	66.20	Gross	Net
SK	Family	0.03	Gross	Net
AB	Renters Assistance	0.07	Gross	Net
	Royalty	0.30	Gross	Net
BC	Venture Capital	7.60	Gross	Net
	Sales Tax	50.00	Gross	Net
<b><u>Corporate Income Tax</u></b>				
QC	Losses Other Than Capital Losses	82.20	Gross	Net
	Scientific Research and Experimental Development	312.00	Gross	Net
	Manpower Training	24.10	Gross	Net
	Cinematographic Productions	27.30	Gross	Net
	Taxi Companies	0.30	Gross	Net
	Small Business Capitalization	1.00	Gross	Net
	Property Taxes for Forest Products	3.10	Gross	Net



**Change:** All refundable tax credits are now treated as expenditures in both the FMS and the CSNA. In other words, the corresponding income taxes are recorded on a gross basis. The treatment of the other tax credits remains unchanged.

### 2.3 Profits of Government-Owned Liquor Boards and Gaming Activities

**Issue:** Should profits of government-owned liquor boards and gaming activities be treated as indirect taxes or as profits?

**Pre-Revision Treatment:** Profits of liquor boards were always treated as government investment income in the FMS. In the CSNA, they were treated as indirect taxes starting with the 1971 Historical Revision. Profits of government gaming activities such as lotteries, casinos and video lottery terminals were treated as government investment income in both systems.

**Discussion Notes:** The 1993 SNA notes: "Fiscal monopolies are public corporations, public quasi-corporations, or government-owned unincorporated enterprises that have been granted a legal monopoly over the production or distribution of a particular kind of good or service in order to raise revenue and not in order to further the interests of public economic or social policy. Such monopolies are typically engaged in the production of goods or services which may be heavily taxed in other countries, for example, alcoholic beverages, tobacco, matches, petroleum products, salt, playing cards, etc. The exercise of monopoly powers is simply an alternative way for the government to raise revenue instead of the more overt procedure of taxing the private production of such products. In such cases the sales prices of the monopolies are deemed to include implicit taxes on the products sold. While in principle only the excess of the monopoly profits over some notional "normal" profits should be treated as taxes, it is difficult to estimate this amount, and, in practice, the value of the taxes should be taken as equal to the amount of the profits actually transferred from fiscal monopolies to government." (Paragraph 7.69e)

Treating profits of liquor boards and government gaming activities as part of operating surplus would mean that such income results from the use of a factor of production. This is not the case, since this income accrues to government as a result of its fiscal monopoly. It was felt that such revenues should always be considered indirect taxes.

At the 1996 Federal-Provincial Conference on Provincial Economic Accounts and Public Sector Statistics, some provincial focal points objected to the decision to classify revenues of Government-owned gaming activities as indirect taxes and we agreed to re-examine it. After re-examination, we remained convinced that the profits of these units were not a return on capital but were due to government monopoly. Hence, they are more like taxes than investment income. However, that should not preclude provincial governments to present them otherwise.

In the CSNA, total profits (remitted and unremitted) of government-owned liquor boards were treated as indirect taxes. The same logic should apply to gaming activities. In the

FMS where only remitted profits are treated as government revenue, the unremitted profits should be shown as a reconciliation item between the two systems.

**Change:** Total profits of government-owned liquor boards and gaming activities are now treated as indirect taxes in the CSNA, while their remitted profits are treated as such in the FMS. The difference between the two *will be* shown as a reconciliation item. The profits are presented separately, thus permitting users to re-aggregate them differently than in the standard presentation of the CSNA or the FMS.

## 2.4 Licences, Privileges and Permits

**Issue:** Should licences, privileges, concessions and permits be considered indirect taxes, transfers or sales of services?

**Pre-Revision Treatment:** They were variously classified in the CSNA as indirect taxes, transfers from persons to governments or as sales of services. In the FMS, they formed a separate category.

**Discussion Notes:** The 1993 SNA notes: "Households make payments to government units to obtain various kinds of licences, permits, certificates, passports, etc., and in some cases it is not clear whether government units actually provide services in return, such as testing or inspection, or whether the payments are *de facto* taxes. As explained in chapter VIII, paragraph 8.54 (c), the treatment of certain controversial borderline cases has been decided by the following convention, based on the practices followed in the majority of countries: payments by households for licences to own or use vehicles, boats or aircraft and also licences to hunt, shoot, or fish are treated as taxes, while payments for all other kinds of licences, permits, certificates, passports, etc. are treated as purchases of services and included in household consumption expenditure." (Paragraph 9.62). Licences purchased by businesses are to be considered taxes on production unless the government renders some service in issuing the licence, such as an inspection (paragraph 7.70).

In developing the FMS classification of revenues and expenditures by function and sub-function, Statistics Canada consulted representatives from the Departments of Municipal Affairs across Canada. This is why all local governments identify privileges, licences and permits as a separate class in their administrative documents.

It was recognized that, in some instances, it was open to interpretation whether the licence, permit or concession was an indirect tax (unrequited payment, as the government provides nothing in return) or a service. However, the 1993 SNA distinction should be followed. It was therefore decided make a complete review of licences in order to ensure that their treatment in the CSNA complies with the 1993 SNA recommendation. The conclusion of the review was that although some local government licences should be treated as services, data limitations prevented the split of this category. Thus all local licences continue to be classified as indirect taxes.



**Change:** The 1993 SNA recommendation to treat payments by households for some specific licences such as those to own or use vehicles, boats or aircraft and also to hunt, shoot or fish as indirect taxes has been adopted. All other licenses are treated as sales of services. Note that previously, payments by households for licenses to own and operate vehicles were treated as transfers, thus more like direct taxes. The change results in a large upward revision to household expenditure on services. All licences purchased by business are treated as indirect taxes. All revenues from concessions and those licences classified as sales of services in the CSNA are now also treated as sales in the FMS. All local licences continue to be treated as indirect taxes.

Separate sub-classes for licences and concessions within 'sales of goods and services' are being maintained in the FMS to allow an aggregation of all licences.

## **2.5 Premiums Paid to Deposit Insurance Corporations**

**Issue:** Should premiums paid by financial corporations to deposit insurance corporations be treated as indirect taxes?

**Pre-Revision Treatment:** These premiums were treated as insurance revenues, just like those paid to other insurance companies.

**Discussion Notes:** Deposit insurance corporations were previously classified to the business sector. However, it was decided to shift them to the Government sector because they did not behave as commercial insurance companies in three crucial respects: (a) premiums charged consistently failed to cover claims; (b) claims were paid on uninsured assets; and (c) deposit insurance was required by the same governments holding the monopoly on the service (see Item 1.8). As a result, deposit insurance is more like an indirect tax than a payment for insurance services.

**Change:** Deposit insurance premiums are now treated as indirect taxes. See also Item 1.8.

## **2.6 Fines, Penalties and Interest on Overdue Accounts**

**Issue:** Should fines, penalties and interest on overdue payments be classified in the same category as the income to which they relate (indirect taxes, sales of goods and services or transfers)?

**Pre-Revision Treatment:** Fines and penalties paid on indirect taxes, even when separately identified, were combined with indirect taxes. Other fines and penalties (including those paid by business), when they could be separately identified, were classified as other transfers from persons. Interest identified separately usually was not included with the underlying category.

**Discussion Notes:** The 1993 SNA notes: "Fines and penalties imposed on institutional units by courts of law or quasi-judicial bodies are treated as compulsory current

transfers. However, fines and other penalties imposed by tax authorities for the evasion or late payment of taxes cannot usually be distinguished from the taxes themselves and are, therefore, grouped with the latter in practice and not recorded under this heading." (Paragraph 8.96).

It was recognized that there was no quid pro quo for these payments since the fine was merely a payment for an offence and no service was obtained from it. Therefore, fines should not be considered payment for a service but rather as a transfer from persons, as was the existing practice. Fines paid by business should be recorded as transfers from business, but data limitations did not allow the splitting of fines between persons and businesses in a straightforward manner.

The 1993 SNA further notes: "In principle, interest charged on overdue taxes or fines, or penalties imposed for the attempted evasion of taxes, should be recorded separately and not as taxes. However, it may not be possible to separate payments of interest, fines or other penalties from the taxes to which they relate, so that they are usually grouped with taxes in practice." (Paragraph 8.51). Where interest was charged on overdue accounts, it should be recorded separately, i.e., not as taxes.

**Change:** The 1993 SNA recommendation has been adopted. Fines and penalties paid by persons are now treated as compulsory current transfers. Fines and penalties imposed on overdue taxes of businesses are now treated as taxes. Interest is recorded separately, whenever possible, as part of financing charges. See also Item 3.5.

## 2.7 Payments in Respect of Losses of Government Business Enterprises

**Issue:** Should payments to cover losses of a GBE by the parent government be treated as a subsidy or as a capital transfer?

**Pre-Revision Treatment:** Payments to cover losses of a GBE by the parent government were treated as negative trading profits remitted to government.

**Discussion Notes:** The 1993 SNA recommends that transfers paid to public corporations to compensate for persistent losses incurred on their productive activities as a result of charging prices lower than their costs of production, as a matter of government policy, be treated as subsidies (paragraph 7.78c).

On the other hand, payments to public corporations made to cover large and unanticipated operating deficits accumulated over two or more years should be treated as capital transfers (paragraph 10.141). These were previously treated as negative remitted trading profits.

**Change:** The 1993 SNA recommendation to treat payments to cover losses on current production as a subsidy and those to cover large operating deficits accumulated over two or more years as a capital transfer has been adopted.



## 2.8 Forgiveness and Write-off of Loans

**Issue:** Should the write-off and forgiveness of government loans be treated as a current transfer, a capital transfer or a valuation adjustment?

**Pre-Revision Treatment:** Write-off and forgiveness of loans were handled on a case by case basis. In some instances, they were treated as a subsidy, in others as a capital transfer or as a balance sheet adjustment. Decisions were not always the same in the two systems. In the CSNA, many cases were treated as balance sheet adjustments, while in the FMS, the majority were treated as transfers. Public Institutions Division was splitting only transfers to business into subsidies and capital transfers; transfers to other sectors were not so divided.

**Discussion Notes:** The 1993 SNA makes a distinction between loans that are forgiven or cancelled by mutual agreement (paragraph 10.139) and loans that are unilaterally written off by the creditor (paragraph 10.140). The first case is to be treated as a capital transfer from the creditor to the debtor. In the second case, there is no entry in either the capital or the financial accounts. The adjustment to assets and liabilities is recorded in the Other Changes in the Volume of Assets Account.

It would be difficult to identify mutual agreement write-offs versus unilateral ones. In practice, all write-offs by the Government sector were treated as mutual agreement ones (unless otherwise specified) and all write-offs by the business sector as unilateral (unless otherwise specified). The majority of the cases in Canada would appear to fall into the first group and should be treated as capital transfers. This was the treatment in the FMS. Each case should be treated the same in both the FMS and the CSNA.

**Change:** The 1993 SNA recommendation to treat debts forgiven by governments as capital transfers was adopted in both the FMS and the CSNA, on the assumption that they are being forgiven by mutual agreement. As for debts written off by the business sector, they are considered unilateral write-offs of debt by the creditor, and are treated as balance sheet adjustments in the Other Changes in the Volume of Assets Account.

## 2.9 Transfers from Provincial to Federal Government

**Issue:** Should transfers from provincial to federal government be recorded on a net or gross basis?

**Pre-Revision treatment:** The FMS was recording these transactions on a gross basis, showing the full value of these transfers. In the CSNA, such transactions were netted against the federal transfers to provincial government and the latter presented on a net basis.

**Discussion Notes:** The consequence of the CSNA treatment was that the flows from a lower to a higher level of government were not shown. It was deemed important to record the gross flows for analytical purposes. Examples of transactions netted out

included provincial payments to the federal government for the Crop Reinsurance Fund Account and the Agricultural Commodities Stabilization Accounts.

**Change:** Provincial transfers to the federal government are now recorded on a gross basis in the CSNA, as has been the practice in the FMS.

## 2.10 Revenues Netted Against Expenditure

**Issue:** Should revenues of Government sector units, generally sales of goods and services, be netted against expenditures of these units?

**Pre-Revision Treatment:** The FMS always showed gross expenditures and gross revenues of Government sector units, whereas the CSNA typically presented expenditures on a net basis. Government sector units include departments and agencies as well as autonomous organizations, Boards, Commissions and Funds.

**Discussion Notes:** The FMS aims to provide information on all the activities of government and, thus records gross revenues and expenditures. Since the net data can always be derived from the gross, it was agreed to record gross flows.

**Change:** The CSNA now follows the FMS practice of recording revenues and expenditures on a gross basis.

## 2.11 Royalties

**Issue:** Should revenues from royalties be classified as sales of services, as indirect taxes or as investment income?

**Pre-Revision Treatment:** Royalties on books, recordings, etc., were treated as sales of services. Royalties on land and extraction of resources were treated as investment income. This treatment was introduced in the 1971 CSNA Historical Revision, before which such royalties were treated as indirect taxes.

**Discussion Notes:** There are essentially 2 types of royalties:

(1) Royalties on books, recordings, films, etc. There was agreement that these royalties are sales of services, as recommended by the 1993 SNA (paragraphs 6.146 and 7.92). This type of royalty is not usually received by government and is not the one at issue here.

(2) Royalties on land and subsoil assets. In the 1993 SNA, the revenues from the ownership of land and sub-soil assets are treated as rent, that is, as property income: "Owners of land and subsoil assets may put them at the disposal of other units by arranging contracts or leases under which the tenants, or users of the assets, agree to pay the owners property incomes in the form of rents. The regular payments made by

the lessees of subsoil assets are often described as royalties, but they are treated as rents in the System." (Paragraph 7.87).

Discussion centered on whether such revenues are investment income (property income in the terminology of the 1993 SNA) or sales of services. Since they derive from the government's ownership of the land, rather than from its power to tax, it was decided to continue treating them as investment income.

In the 1993 SNA, the payments for the use of land and sub-soil assets are part of the value added of the industry using such assets (also called 'industry of origin'). This treatment does not require creating an industry to produce resource royalties. As a result, it would lead to the elimination of the "Royalties" industry in the Canadian Input-Output tables. Royalties would now be paid out of the surplus of the using industry. GDP would not change, but the value added of the using industries (mining, forestry...) would increase with the reallocation of rent from intermediate consumption to primary input, with an identical offset in the output and the value added of the major industry group 'Finance, insurance and real estate', to which the 'Royalties' industry belonged.

**Change:** Royalties on books, recordings, films etc. remain treated as sales of services. Royalties on land and subsoil assets remain treated as investment income. However, they are now part of the value added of the using industry and the "Royalties" industry in the Canadian Input-Output tables is eliminated.

Unfortunately, rents paid by farmers for land leases have remained treated as payments for services. This is an oversight that will be corrected at the next opportune time.

## 2.12 Supplementary Labour Income (SLI)

**Issue:** How should social contributions in cash (designated as 'SLI' in the CSNA) paid by a government on behalf of its employees into government accounts, and those paid by one government for another employing government, be treated?

**Pre-Revision Treatment:** SLI paid on behalf of one's own employees into government accounts was consolidated as an inter-fund transaction in the FMS. Often these payments for departments were recorded in the accounts of a central agency. FMS has shown these under the function 'General Services'. There were also instances, particularly in education, where one government paid some portion of SLI on behalf of another government unit.

**Discussion Notes:** The practice in the CSNA, in accordance with international standards, has been to record employer social contributions separately from wages and salaries. Given the decision to harmonize both systems, it was agreed that the FMS would record these payments on a gross basis and not eliminate them as inter-fund transactions. Also, the SLI paid by central agencies should be distributed by function.



There were instances where the SLI was paid by a government other than the employing government. For example, some provincial governments made the contributions to the teachers' pensions, while the school boards paid their salaries. Such contributions were recorded as SLI paid by the provincial government in the CSNA, according to the practice of attributing expenditures to the government that made them. However, for analytical purposes, the wages and salaries and the SLI should be recorded in the same sub-sector. This can be rectified by treating pension plan contributions on behalf of employees in another sub-sector as transfers to that sub-sector. The SLI would subsequently be deemed to have been paid by the sub-sector receiving the transfer, thereby aligning the wages and salaries and the related social contributions.

**Change:** SLI paid on behalf of one's own employees into government accounts is no longer treated as an 'inter-fund' transaction in the FMS and thus is not eliminated in consolidation. As well, the FMS now distributes the SLI by function. Social contributions made by one government on behalf of another employing government are now treated as a transfer to that government, which is deemed to make the payments. Both these changes also apply in the CSNA. See also Item 2.33.

### 2.13 Gain (or Loss) on Foreign Exchange

**Issue:** Should gains (or losses) on foreign exchange be treated as revenue (or expenditure) or as an adjustment on the balance sheet?

**Pre-Revision Treatment:** The FMS recorded realized gains (or losses) as revenue (or expenditure), and unrealized gains (or losses) on the balance sheet, whereas the CSNA recorded both realized and unrealized gains (or losses) on the balance sheet.

**Discussion Notes:** The 1993 SNA notes: "However, as holding gains are recorded on an accrual basis in the System, the distinction between realized and unrealized gains, although useful for some purposes, is not so important in the System and does not appear in the classifications and accounts". (Paragraph 12.72).

In the 1993 SNA, these gains (or losses) are recorded in the revaluation account. The IMF's GFS Manual (paragraph 5.5) has them in the financing account (schedule of sources and applications of funds). They are not part of income (or expenditure) in either system.

**Change:** The FMS will record both realized and unrealized gains (or losses) in the forthcoming Financing Account, a treatment similar to the one applied in the CSNA. See also Item 2.14.

### 2.14 Gain (or Loss) on Sale of Financial Investments

**Issue:** Should gains (or losses) on sale of financial investments be recorded as revenue (or expenditure) or on the balance sheet?



**Pre-Revision Treatment:** The FMS recorded these gains (or losses) as revenue (or expenditure), whereas the CSNA recorded them on the balance sheet.

**Discussion Notes:** As in the case of gains (or losses) on foreign exchange, the 1993 SNA recommends to record these on the Balance sheet, and the IMF's GFS Manual, in the financing account. It was agreed that the FMS should follow the 1993 SNA guidelines.

**Change:** FMS will record such gains (or losses) on investments in the forthcoming Financing Account, a treatment similar to the one applied in the CSNA. See also Item 2.13.

## 2.15 Supplementary Period Adjustments – Federal Government

**Issue:** Supplementary period adjustments are transactions recorded after March 31, but attributed to the previous fiscal year in the Public Accounts of Canada. How should they be treated?

**Pre-Revision Treatment:** The CSNA recorded all supplementary period transactions not dealing with sales or purchases of goods and services in the first quarter of the next fiscal year. Sales and purchases of goods and services were split 50%-50% between the fourth quarter of one fiscal year and the first quarter of the next. The FMS followed the Public Accounts.

**Discussion Notes:** The existing practice in the CSNA is not documented. Given that the Public Accounts are audited financial statements of government transactions, it was agreed that one would require considerable justification to move transactions to another fiscal year. It was recognized that on a conceptual basis there could be an argument for spreading some transactions over the fiscal year but this would be very difficult to do in practice.

**Change:** All supplementary period transactions are now recorded in the last quarter of the fiscal year (first quarter of the calendar year) in which they appeared in the Public Accounts, both in the FMS and the CSNA.

## 2.16 Seigniorage

**Issue:** Should seigniorage be treated as a revenue or as a liability?

**Pre-Revision Treatment:** The revenues derived by the Department of Finance from seigniorage, i.e., the difference between the face value and the production costs of coins, was treated as a revenue in the FMS, but not in the CSNA.

**Discussion Notes:** The 1993 SNA treats both coins and currency notes as a liability of the government. The IMF's GFS manual treats seigniorage as revenue. This inconsistency in treatment was raised by Statistics Canada with the International Inter-

Secretariat Working Group on National Accounts (ISWGNA). In answer to Statistics Canada, ISWGNA recommended that the 1993 SNA treatment be adopted in the forthcoming IMF's GFS Manual (see *SNA News and Notes*, #4, July 1996). Note that coins are already classified as a liability of the government in the Financial Flows and the Balance Sheet of the CSNA.

**Change:** In accordance with the recommendation of the 1993 SNA, seigniorage is no longer treated as a revenue, and coins are recorded as a liability in the FMS.

## 2.17 Federal Consolidated Special Purpose Accounts

**Issue:** Should all special purpose accounts be recorded in the FMS and the CSNA?

**Pre-Revision Treatment:** The revenue and expenditure of several special purpose accounts (listed below) were not recorded in the CSNA, though they were in the FMS. Neither the FMS nor the CSNA included these accounts in the federal government balance sheet.

**Discussion Notes:** These accounts are not significant and it is difficult to get their quarterly data, as required for the CSNA. Some of them were not even considered part of the public sector universe under the CSNA. With the 1997 Historical Revision, the two universes are harmonized. Consequently, while these accounts have a minimal importance, they should be recorded in the CSNA. The accounts in question are:

### Canadian Heritage

Alexander Graham Bell National Historic Site  
 Claudia de Hueck Bequest Account  
 Fort Langley Legacy Foundation - Donations  
 Marconi Celebration Trust Fund  
 National Archives of Canada - Donations  
 National Battlefields Commission - Trust Fund Account  
 National Library - Special Operating Account

### Environment

Endangered Species - Donations  
 Fish Habitat Restoration Account

### Finance

Canadian Commercial Bank and Northland Bank Holdback Account

### Fisheries and Oceans

Supplementary Fines Fish Account

### Governor General

Friends of Rideau Hall Account

Health

Sioux Lookout Zone Hospital

Medical Research Council - Donations for Research

Human Resources Development

Canadian Centre for Occupational Health and Safety - Donations

Indian Affairs and Northern Development

Environmental Studies Research Fund

Industry

National Research Council of Canada - H.L. Holmes Fund

Natural Sciences and Engineering Research Council - Donation Trust Fund

Natural Resources

Environmental Studies Research Fund

Privy Council

Canadian Transportation Accident Investigation and Safety Board - Flight

Recorder Software Systems Account

National Round Table on the Environment and Economy - Donations

Public Works and Government Services

Seized Property Proceeds Account

Transport

Fines for the Transportation of Dangerous Goods

**Change:** All federal consolidated special purpose accounts are now included in the federal government revenue, expenditure and balance sheet in both systems.

## **2.18 Adjustment to Income Taxes of Life Insurance Companies**

**Issue:** Should the CSNA allocate any portion of corporate income tax collections from life insurance companies to personal income taxes?

**Pre-Revision Treatment:** The CSNA was allocating a small portion of the corporate income taxes collected from life insurance companies to the household sector. This adjustment was not done in the FMS.

**Discussion Notes:** The assets associated with life insurance policies are deemed to be assets of households (see 1993 SNA, Annex IV, page 573, paragraph 22). The income from these assets was attributed to households and was recorded on a gross basis, before deduction of the corporate tax. This tax was then shown as being paid by households. It was argued that one could as easily record the income earned net of corporate taxes.



**Change:** The CSNA no longer allocates a portion of the corporate income tax paid by insurance companies to personal income taxes; instead, life insurance companies are deemed to pay the entire tax and the income attributed to the household sector is recorded net of that tax.

## 2.19 Quebec Youth Allowances

**Issue:** How should the compensatory payment by the Quebec Government to the Federal Government related to the defunct Quebec Youth Allowance Program be recorded?

**Pre-Revision Treatment:** When the Quebec Youth Allowance Program existed, the federal government transferred 3.0 tax points to the Quebec government to support it. After it ended in 1974, there was no reason for the Federal Government to continue transferring the tax points. An arrangement was made whereby the Quebec Government would continue receiving the tax points, but would remit an equivalent amount to the Federal Government. Thus, in the Quebec Public Accounts, income tax revenue is shown as including these 3.0 tax points and the remittance to the federal government is recorded as a negative federal transfer. The federal Public Accounts show a negative transfer to the province. The CSNA recorded these transactions as reported in the Public Accounts of the two governments. The FMS recorded the Quebec provincial income and expenditure on a net basis, and the Federal income and expenditure on a gross basis. In the FMS, the 3.0 tax points were added to the federal personal income tax revenue and an equivalent expenditure added as equalization payment to Quebec. The result was that the amount corresponding to the tax points was counted twice, once as Federal personal income tax and once as Quebec personal income tax.

**Discussion Notes:** It was agreed that the grossing up of the revenue and expenditure of the Federal Government was not a neat solution. A simpler solution would be to treat the amount as a transfer from the Quebec Government to the Federal government. This would also be consistent with the earlier decision concerning transfers from lower levels of government (see Item 2.9).

**Change:** Both the FMS and the CSNA now record the Quebec remittance made in counterpart of the 3.0 tax points transferred by the Federal Government as a general purpose transfer from the Quebec government to the Federal Government. This change has no impact on the surplus or deficit position of either government.

## 2.20 Federal Payment to Quebec for the Purchase of Frigates

**Issue:** How should the federal government's payment to MIL Davie shipyards through the Quebec government in 1992 be recorded?

**Pre-Revision Treatment:** This transaction was treated as a purchase of defence goods from the Quebec government in the CSNA. However, because the money actually went



to the Quebec government's general revenue fund, it was treated as a transfer to the Quebec government in the FMS.

**Discussion Notes:** At the time, MIL Davie was building part of the new frigates for the Canadian armed forces. The discussion hinged on whether it was possible for a government to subsidize its own purchase of goods and services. It was generally felt that the federal payment should not be considered a subsidy, but an increase in the price of the goods being purchased. Since the Quebec government was not purchasing anything from MIL Davie, its payment would be a subsidy.

**Change:** Both the FMS and the CSNA now treat the federal payment as a purchase of goods from the Quebec government by the Department of National Defence, rather than as a transfer to that government. The Quebec government's payment to MIL Davie remains classified as a subsidy.

## 2.21 Adjustments to Employment Insurance Premiums

**Issues:** Should the EI premiums be (a) adjusted to an accrual basis and (b) benchmarked on the Public Accounts?

**Pre-Revision Treatment:** The CSNA adjusted monthly EI premiums to an accrual basis, while the FMS adhered to the reported values. Neither of the two systems benchmarked premiums to the ones in the Public Accounts.

**Discussion Notes:** The Public Accounts show EI premiums after adjustments for over- or under-payments related to previous years. In recent years, these adjustments have been getting larger. The CSNA had been reversing these prior-period adjustments to better reflect employer/employee contributions in the current period. The resulting estimates were therefore closer to an accrual basis. The FMS recorded the monthly premiums as reported. In addition, neither of the two systems benchmarked the monthly premiums on a cash basis to the fiscal year figures in the Public Accounts.

**Change:** The CSNA and the FMS now benchmark monthly premiums on a cash basis to the figures in the Public Accounts. In addition, the CSNA continues to reverse the prior-period adjustments, in order to show the premiums on an accrual basis.

## 2.22 GST Low Income Refundable Tax Credits

**Issue:** Should the monthly data on GST low income refundable tax credits be benchmarked on the Public Accounts?

**Pre-Revision Treatment:** Both the FMS and the CSNA add back these credits to the GST in order to show the latter on a gross basis. The FMS source is the Public Accounts. The CSNA source is the monthly data Revenue Canada, which do not add up to the figures in the Public Accounts used in the FMS.

**Discussion Notes:** It was agreed that the monthly data should be benchmarked on the Public Accounts.

**Change:** The monthly data on GST low-income refundable tax credits, like those on the GST, are now benchmarked to the Public Accounts.

## 2.23 Canadian Dairy Commission

**Issue:** Should the quarterly data from the Canadian Dairy Commission (CDC) used in the CSNA be benchmarked to the figures in the Public Accounts?

**Pre-Revision Treatment:** The FMS incorporated the data from the Public Accounts on a gross basis. The CSNA used the net quarterly data supplied by the CDC, without benchmarking them to the Public Accounts.

**Discussion Notes:** It was agreed that the quarterly data used in the CSNA should be benchmarked on the Public Accounts.

**Change:** The CSNA now benchmarks the quarterly data from the Canadian Dairy Commission to the figures in the Public Accounts.

## 2.24 Doubtful Taxes in Quebec

**Issue:** The Quebec Government reports gross income tax liabilities and makes a provision for doubtful taxes. Actual losses are charged against that provision. Should the income tax receipts be recorded on a gross or a net basis, that is, before or after deduction of that provision?

**Pre-Revision Treatment:** The CSNA had been recording the gross taxes as reported in the Quebec Public Accounts. The FMS had been recording the net taxes.

**Discussion Notes:** Taxes should be recorded on a gross basis according to the 1993 SNA. However, all provincial governments, except that of Quebec, report income taxes on a net basis in the Public Accounts. In the interest of comparability between provinces, it was deemed preferable to record the Quebec income taxes on a net basis.

**Change:** Income tax receipts for Quebec are now shown on a net basis, after deduction of the provision for doubtful taxes, in both systems.

## 2.25 Consumption Taxes Levied and Paid by the Same Government

**Issue:** Should consumption taxes be recorded on a gross basis or a net basis, that is, before or after deduction of consumption taxes paid by the government levying the tax?

**Pre-Revision Treatment:** These taxes were recorded on a net basis in the FMS, and on a gross basis in the CSNA.

**Discussion Notes:** Only two provincial governments record the taxes they pay to themselves. In the FMS, consumption taxes are reported on a net basis for these two provincial governments and on gross basis for the other ones. In the interest of harmonization and inter-provincial comparability, it was deemed preferable to show all consumption taxes on a gross basis. The GST paid by federal departments is fully refunded to them and thus not affected by this decision.

**Change:** Consumption taxes are now recorded on a gross basis, that is, before deduction of taxes paid by governments to themselves, in both systems.

## 2.26 Alberta Royalty Tax Credit

**Issue:** The Alberta corporate tax is reported in the Alberta Public Accounts net of the royalty tax credit. How should the credit be recorded?

**Pre-Revision Treatment:** The FMS grosses up the corporate tax by the amount of the tax credit and imputes an equivalent expenditure under 'Resource conservation – industrial development'. The CSNA records the tax as reported.

**Discussion Notes:** The Alberta royalty tax credit is not tied to a corporation's tax return. It depends on the average price of oil and is capped at a certain level of total royalties paid. Since it has nothing to do with the corporate tax, the latter should be recorded on a gross basis. The tax credit is really a royalty refund and should be deducted against royalties.

**Change:** Alberta royalty receipts are now recorded after deduction of this credit/refund in both the FMS and the CSNA. The Alberta corporate taxes have been grossed up by the value of the royalty tax credit, so that the surplus or deficit remains unchanged. See also Item 2.2.

## 2.27 Refundable Credit for Losses on Mining Operations in Quebec

**Issue:** Should the Quebec mining tax be recorded on a gross basis (that is, before deduction of the refundable credit for losses), and this credit be treated as a subsidy?

**Discussion Notes:** The Quebec mining duties system, reformed in 1985 to allow mining companies to obtain a positive cash flow during their initial years of operation before they became profitable, did not work out as anticipated. The credits exceeded the mining tax collections each year from 1987-88 on. A new mining duties system was announced in the 1993-94 budget and described in the 1994-95 budget. Its aim was to lower the tax credit for losses, deemed too generous.

Up to 1987-88, the mining tax was presented in the Quebec Public Accounts as a revenue of the Department of Energy and Resources, and the credits for losses, as an expenditure under Program 10, Component 2, of that department. In 1988-89, the Quebec government decided to present the mining tax on a net basis. Starting in 1987-



88, however, FMS treated this expenditure as a capital transfer rather than as a production subsidy.

**Change:** In keeping with the decision to record taxes on a gross basis (i.e., before deduction of the related refundable tax credits) whenever possible, the Quebec mining tax is now recorded on a gross basis. The refundable tax credit is now treated as a subsidy in both systems, and shown under 'Resource conservation – Industrial development' in the FMS classification by function.

## **2.28 Rent Supplements Paid by Provincial Housing Authorities to Landlords**

**Issue:** Should rent supplements paid by Provincial Housing Authorities to landlords be treated as an expenditure on services or as a subsidy?

**Pre-Revision Treatment:** Provincial Housing Authorities, then part of the business sector, made payments directly to landlords to "supplement" the rent paid by the tenants living in subsidized housing. In this sense, these payments were akin to a purchase of rental services by the Provincial Housing Authorities.

**Discussion Notes:** Provincial Housing Authorities have now been transferred from the Business sector to the Provincial Government sub-sector (see Item 1.9). It could be argued that the rent supplements they pay to landlords serve to lower the price of lodging and therefore could be considered production subsidies. However, since these payments by the Housing Authorities reduce the rent of a specific group of tenants and do not constitute a general reduction of rent, they should continue to be treated as an expenditure on services.

**Change:** Rent supplements continue to be treated as an expenditure on services, but by the Government sector instead of the business sector as the housing authorities have been transferred from the latter to the former.

## **2.29 Lot Levies**

**Issue:** Should lot levies be treated as indirect taxes or sales of services?

**Pre-Revision Treatment:** They were treated as sales of services in the FMS and as indirect taxes in the CSNA.

**Discussion Notes:** While lot levies could have been linked to specific services in the past, they now resemble taxes and should be treated as such.

**Change:** Lot levies are now treated as indirect taxes in both systems. In addition, they remain in a separate category in the FMS, due to the requirements of Federal-Provincial Fiscal Arrangements.

### 2.30 Local Capital Transfers

**Issue:** Capital transfers from local governments to their own GBEs, other businesses and persons are recorded in the FMS, but not in CSNA.

**Discussion Notes:** It was agreed that there was no reason to leave out such capital transfers in the CSNA.

**Change:** The CSNA now records all local capital transfers.

### 2.31 Miscellaneous Revenue – Local Government

**Issue:** In the FMS, one of the items under local government (general administration component) revenue is 'miscellaneous revenue'. The same item was split in the CSNA as follows: 70% to sales of goods and services, 10% to transfers from persons and 20% to inter-fund transactions.

**Discussion Notes:** These percentages were adopted at the time of the 1986 CSNA Historical Revision, on the assumption that the category 'miscellaneous revenue' contained items that should be excluded from revenue. The problem occurs when municipalities report revenues under the heading 'Other', which sometimes includes a 'surplus from previous year' or an 'adjustment to previous year's figures'. Such items should be treated as inter-fund transactions in both the FMS and the CSNA. Yet, in the FMS, 'Other' was recorded as miscellaneous revenue.

A re-examination of available data has indicated that the percentages estimated at the time of the 1986 CSNA Historical Revision were reasonable. It was agreed that FMS should adopt the same percentages.

**Change:** The FMS has now adopted the CSNA practice of splitting miscellaneous revenue as follows: 70% to sales of goods and services, 10% to transfers from individuals and 20% to inter-fund transactions.

### 2.32 Sales of Goods and Services to Other Governments

**Issue:** Part of the revenue from sales of goods and services to other governments were recorded as transfers in the CSNA on the grounds that they were more like grants than sales of services.

**Discussion Notes:** Based on earlier research, the Input-Output Division reclassified these revenues from 'sales of goods and services' to 'transfers'. An inter-divisional working group reviewed the relevant documentation and concluded that the most of these revenues were sales of goods and services.

**Change:** The CSNA has now adopted the FMS practice to show all such revenues as sales of goods and services.

### 2.33 Teachers' Pension Plans – British Columbia

**Issue:** The British Columbia government used to make the employers' contributions to the teachers' pension plans. Since 1992/93, it makes a transfer to local school boards, which in turn make the contributions to the pension plans. FMS has continued to show the latter as paid by the provincial government, whereas the CSNA has shown them as made by local school boards beginning in 1992/93.

**Discussion Notes:** The Education, Culture and Tourism Division (ECTD) continues to show the contributions as coming from the Provincial Government in order to maintain inter-provincial comparability, even though the payments are made by local school boards. The ECTD data are used as is in the FMS, but are corrected in the CSNA. In effect, as of 1992/93, the Input-Output Division takes these contributions out of the provincial expenditure as recorded by ECTD and transfers them to local school boards.

**Change:** The FMS has now adopted the existing CSNA practice to show these contributions to pension plans in the 'school boards' component of the Local government sub-sector and to record the provincial expenditure as a transfer to school boards. See also Item 2.12.

### 2.34 Property Tax Credits - British Columbia, Alberta and Manitoba

**Issue:** The British Columbia, Alberta and Manitoba governments have programs to lower the effective tax rate of designated homeowners and renters. How should these programs be treated?

**Pre-Revision Treatment:** The FMS added back these tax credits to the property taxes, showing the property taxes on a gross basis, in other words, before deduction of the credits. In the CSNA, these tax credits were classified as a general transfer from provincial government to local government.

**Discussion Notes:** In all cases, the taxpayer does not actually pay the full property tax. In Alberta and Manitoba, the provincial government transfers the equivalent revenue to local governments. In British Columbia, the provincial government collects property taxes and transfers to school boards an amount equivalent to this 'tax reduction'. In some other provinces, property tax assistance is granted by way of refundable tax credits handled through the income tax system.

**Change:** The FMS has adopted the CSNA practice of treating such credits as transfers from provincial government to local governments, and thus no longer adds them back to local property taxes.

### 2.35 Education Sales to Other Levels of Government – Quebec

**Issue:** Quebec school boards receive money from the federal and provincial governments for adult training. Are these other governments receiving services in return



or are they simply giving grants (transfers) to the school boards?

**Pre-Revision Treatment:** The revenues of school boards from adult training were treated as transfers from the federal and provincial governments in the FMS, and 'sales of goods and services' in the CSNA.

**Discussion Notes:** School boards in Quebec offer adult training courses and the revenues and expenditures associated with the program appear in their annual reports. In the FMS, federal and provincial government payments for adult training were considered grants to school boards. In the CSNA, they were treated as sales of services to other governments. Since school boards are in fact performing a service, the related revenue should be treated as sales of services. Similar services by school boards in other provinces are already treated as such..

**Change:** The FMS has now adopted the CSNA practice of classifying Quebec school board revenues from adult training as sales of services.

## 2.36 Grants in Lieu of Taxes

**Issue:** Should payments by the federal government and provincial governments to local governments in lieu of property taxes be considered as grants or indirect taxes?

**Pre-Revision Treatment:** Payments by other governments to local governments in lieu of property taxes were treated as grants (i.e. transfers).

**Discussion Notes:** As all government in Canada is exercised in the name of the Crown, and the Crown cannot tax itself, a legal arrangement was established whereby local governments received grants in lieu of taxes on the land and buildings of other governments. A business owning the same land or property would pay property taxes. The economic reality was that both paid taxes, but in one instance it was called a tax and in the other, a grant in lieu of tax. The two systems should reflect the economic reality.

**Change:** Grants in lieu of taxes paid by the federal government and provincial governments are now treated as indirect taxes in both the CSNA and the FMS.

## 2.37 Allowances for Losses on Government Loans

**Issue:** Should government loans to government business enterprises (GBEs) and others (governments and businesses) be shown net of allowances for losses?

**Pre-Revision Treatment:** The FMS showed government loans to GBEs and others net of the allowances for losses, whereas the CSNA did not. The rationale for ignoring the allowances in the CSNA was that loan assets must be reconciled to loan liabilities and a loan liability should be reported as the amount for which a borrower is liable (that is,

gross of allowances). However, both the CSNA and the FMS recorded loan liabilities of GBEs on a gross basis.

**Discussion Notes:** There is general agreement that if a government reports an allowance for loss against a loan to a GBE for which it does not expect to be paid back, then the loan asset would be best shown net of this amount in both the FMS and the CSNA. This reflects standard accounting practice.

**Change:** The CSNA has now adopted the practice of deducting allowances for losses on government loans to government business enterprises and others, thus showing these loans on a net basis. As a result, the corresponding liabilities are now also shown net of allowances in both the FMS and the CSNA.

### **2.38 Liabilities of the Federal Government in Respect of Foreign Loans of Government Business Enterprises**

**Issue:** Should allowances for losses on foreign loan assets of the Export Development Corporation (EDC) and the Canadian Wheat Board (CWB) also be recorded as a liability of the federal government?

**Pre-Revision Treatment:** In the FMS, this liability was ignored. In the CSNA, the liability was deducted from the federal government's assets, specifically, from its investment (equity) in EDC and CWB.

**Discussion Notes:** The balance sheet of the federal government shows loans to enterprises and to other domestic entities, as well as loans to foreigners (including loans administered by EDC). All these are shown net of allowances for losses in the FMS and the CSNA (see item 2.37).

EDC makes additional loans to foreign countries, and so does the CWB. However, EDC deducts allowances from the loan assets, while CWB does not, because of the federal guarantee attached to the loans. The FMS followed this accounting for the allowances. In the CSNA, the allowances were deducted from the loan assets of both EDC and CWB.

EDC and CWB borrow from financial institutions to finance the loans they make to foreign countries. The federal government guarantees this borrowing and debt. As a result, it records in the Public Accounts a liability on its balance sheet equal in value to the allowances on the foreign loans of EDC and CWB. This liability relates to the probability of having to finance the repayment of funds borrowed by EDC and CWB.

The CSNA excluded this liability, because it was viewed as a contingent liability. However, the CSNA did reflect the decline in value of the loan assets of the enterprises as a reduction in the value of the government's investment in EDC and CWB.

**Change:** Both the CSNA and the FMS have now adopted the following presentation. A federal government liability is recorded in respect of the allowances for losses against the loan assets of EDC and the CWB; and a corresponding claim on the federal government, equal to the allowances, is shown on the balance sheet of those enterprises.

### **2.39 Government Liabilities in Respect of Employee Pension Plans: Autonomous Plans with Invested Assets**

**Issue:** Should the actuarial deficiencies of employee pension plans with invested assets and that are managed by trustees be recorded as liabilities of the provincial governments?

**Pre-Revision Treatment:** Both the FMS and the CSNA ignored the actuarial deficiencies.

**Discussion Notes:** In Canada, employee pension plans with invested assets and that are managed by trustees independent of the employer are referred to as 'trusteed pension plans'. Such plans are separate institutional units and are thus autonomous schemes. The 1993 SNA treats trusteed pension plans as private funded schemes (paragraph 8.63 b).

These funds consist of a reserve of money (invested in securities) that employees and their employer have contributed towards future payments of pension upon retirement of the employees. The reserve becomes trusteed when the money is deposited with, and managed by, an independent group or organization that acts as a trustee. An actuarial appraisal of the fund is done from time to time to determine if the fund is adequate to fulfil its present and future obligations. Actuarial deficits are liabilities of the employer.

Most provincial governments guarantee any deficiency, in the event that the assets of the plan are insufficient to meet benefit payments or cover administration costs. Some governments do not explicitly recognize a liability or record it on their balance sheet. Since private sector employers are required to record these actuarial deficiencies as liabilities, it seems reasonable to treat governments in a similar fashion.

**Change:** The actuarial deficiencies of the trusteed pension plans of government employees will be recorded as liabilities for all provincial governments in both the FMS and the CSNA.

The implementation of this change will be delayed in the CSNA, until other OECD countries implement the 1993 SNA.

### **2.40 Government Liabilities in Respect of Employee Pension Plans: Non-autonomous Plans without Invested Assets**

**Issue:** Should a liability of the federal government and some provincial governments be



recorded for the accrued liability and/or actuarial deficiency in respect of employee pension plans without invested assets?

**Pre-Revision Treatment:** The FMS recorded government liabilities (representing the accumulated amount of contributions and investment income credited) in respect of employee pension plans without invested assets, but the CSNA did not. Both the FMS and the CSNA ignored any actuarial deficiency related to these plans.

**Discussion Notes:** In the government sector, all employer and employee contributions to pension plans without invested assets are deposited in the Consolidated Revenue Fund of the government. The government uses these funds to finance its current operations, but is responsible for all future pension payments. When pension payments are made, they come out of the Consolidated Revenue Fund. An actuarial estimate is generally made to determine the liability of the government to the plan.

Generally speaking, these are non-autonomous plans (under the control of the employer), with no special reserve (invested assets) from which to pay benefits. It seems reasonable to treat these employee pension plans of the federal and provincial governments in a similar fashion to autonomous plans with invested assets, since: (i) the governments are not likely to default; (ii) government employees think of these plans as part of their net worth.

**Change:** The FMS will record on the balance sheet of governments all liabilities (even actuarial deficiencies) in respect of their employee pension plans without invested assets. This covers cases where these liabilities may not be recorded on the balance sheet, but acknowledged in the notes of government public accounts.

The implementation of this change will be delayed in the CSNA until other OECD countries implement the 1993 SNA.

## 2.41 Treasury Bills

**Issue:** Should Treasury bills be recorded at par, that is, at face value, on the federal government balance sheet? How should the unamortized discount on Treasury bills be treated?

**Discussion Notes:** The unamortized discount on a Treasury bill is the difference between the face value of the bill and the amount received from its sale, difference that remains to be amortized over the life of the bill. Both the FMS and the CSNA record Treasury bills at par. In the FMS, outstanding Treasury bills are recorded as a gross liability and the unamortized discount, as an asset on the balance sheet of the federal government. In the CSNA, outstanding Treasury are also shown as a gross liability, but the unamortized discount is recorded as a reduction of 'other liabilities'.

However, the 1993 SNA recommends to record Treasury bills at market value, in other words, to deduct the unamortized discount from the face value of the Treasury bill. This

is also the current treatment of debt securities that are issued at discount. The CSNA treatment is not consistent with the 1993 SNA, but in effect yields the same lower liability for the government. The current IMF Manual on Government Finance Statistics recommends recording the total government debt at face value (i.e., on a gross basis) and the unamortized discount as a memorandum item in reconciling the change in total debt.

**Change:** It was decided not to adopt the 1993 SNA recommendation with respect to Treasury bills. In addition, the FMS has now adopted the CSNA practice to show Treasury bills at par and the unamortized discount as a reduction of liabilities.

## **2.42 Notes Payable to the IMF, Outstanding Cheques and Bank Overdrafts**

**Issue:** In the FMS, notes payable to the IMF, outstanding cheques and bank overdrafts are recorded as liabilities, whereas in the CSNA they are shown as a reduction of assets. Thus, the asset 'cash' is reduced by the value of outstanding cheques, the asset 'government enterprise claims' by that of notes payable to the IMF and the asset 'currency and other deposits' by that of bank overdrafts.

**Discussion Notes:** Notes payable to the IMF are part of Canada's official reserves. According to IMF guidelines (Manual on Government Finance Statistics, 1986, page 61), the FMS should show these notes as a reduction of assets, as is done in the CSNA, rather than as a liability.

There are two kinds of cheques outstanding, namely cheques in transit and cheques that have never been cashed (and may never be). To the extent that data allow, deposits must be recorded net of cheques in transit. A cheque drawn on the payer's account may be credited to the recipient's account, but not yet cleared and debited from the payer's account. This inconsistency is corrected by deducting cheques in transit. In the case of the federal government, however, there are cheques outstanding that may never be cashed. Such cheques should not be deducted from 'deposits' or 'cash'. They remain accounts payable.

Both the FMS and the CSNA agree that overdrafts should be treated as liabilities.

**Change:** The FMS has now adopted the CSNA practice to record notes payable to IMF and other international organizations as a reduction of assets. The CSNA has now adopted the FMS practice to record cheques that have never been cashed as accounts payable and overdrafts as liabilities.

## **2.43 Foreign Subsidiaries of Government Business Enterprises**

**Issue:** In the FMS, foreign subsidiaries of government business enterprises are consolidated with the parent enterprise, while the CSNA looks at Canadian operations of GBEs and only the investment in foreign subsidiaries is relevant. As a result, the FMS



includes all foreign earnings in the revenue of GBEs, while the CSNA only takes into account dividends received.

**Discussion Notes:** The foreign subsidiaries of GBEs are not part of the Canadian business sector as they are non-resident units. Therefore, their financial statements should not be consolidated with those of the parent enterprise in the CSNA.

The Industrial Organization and Finance Division records the investment of Canadian parent companies in foreign subsidiaries on the basis of their share of equity and includes a portion of the net income of the foreign subsidiary in the revenue of the parent, based on that same share. This income is also reflected in the value of the investment in the subsidiary on the balance sheet of the parent. This treatment would seem an appropriate one for the FMS.

The CSNA records in the revenue of the parent only the dividends received from the foreign subsidiary, which are usually not equal to the parent's share of the net income of the subsidiary based on its share of the subsidiary's equity. The value of the investment in the foreign subsidiary shown on the balance sheet of the parent, however, does correspond to its share of the equity. This inconsistency between flows and stock is handled by an adjustment in the 'Other Changes in Assets Account' in the CSNA.

**Change:** The FMS no longer consolidates foreign subsidiaries of GBEs with the parent enterprise. Instead, it now includes in the revenue of the parent the portion of the net income of its foreign subsidiary corresponding to its share of the equity. The CSNA treatment is unchanged. The difference between the two estimates of revenue is now shown as a reconciliation item.

## 2.44 Individual Funds of the Caisse de Dépôt et de Placement du Québec

**Issue:** In the FMS, both the General Fund and the Individual Funds of the Caisse de dépôt et de placement du Québec are classified in the business sector. In the CSNA, only the General Fund belongs to the business sector. The Individual Funds are classified in the household sector or the government sector.

**Discussion Notes:** The General Fund and the Individual Funds are managed by the Caisse de dépôt et de placement du Québec. The CSNA shows the investment portfolio of the Individual Funds on the balance sheet of the government or the household sector. In the FMS, all the funds are shown on the balance sheet of the Caisse.

The Caisse's General Fund includes diversified investments and is a pooled fund. The participating deposit holders include the Régie des rentes du Québec, the Société de l'assurance automobile du Québec and six other unit holders. These agencies/groups deposit money with the Caisse which, as any other deposit-taking institution, invests it in various securities to provide a return to the depositor.



The Individual Funds of the Caisse, such as the supplemental pension plan of the construction industry, also include diversified investments, but each 'Fund' has only one 'depositor'. The balance sheets of the depositors show deposits with the Caisse as assets, while the Caisse's balance sheet shows corresponding deposit liabilities.

The CSNA views the Caisse as the trustee of the Individual Funds. Accordingly, it considers that the deposits of these Funds are not assets of the Caisse and that the investments of each fund should be reported by the depositors. The latter can only be obtained from the Caisse, however, since the financial statements of the depositors show only a deposit asset. The portfolios of the Individual Funds relating to government are recorded on the balance sheet of the government sector, and those of the other individual funds, on that of the household sector.

**Change:** The FMS has now adopted the CSNA practice to treat only the General Fund as an asset of the Caisse de dépôt et de placement du Québec and to show all Individual Funds on the balance sheet of their depositors.

## **2.45 Manitoba Telephone Investments for its Pension Obligations**

**Issue:** The investment portfolio of Manitoba Telephone relating to its pension obligations and the corresponding pension liability are recorded on the balance sheet of the household sector in the CSNA, but on the balance sheet of the enterprise in the FMS.

**Discussion Notes:** Manitoba Telephone holds investments for its pension obligations. On its balance sheet, these assets are equal to the pension liability. The CSNA treats this arrangement as a trust account and thus records the value of the investment portfolio and the pension liability on the balance sheet of the household sector. The FMS would also accept this as a trust account.

**Change:** The FMS has now adopted the CSNA practice to show the investment portfolio and the pension liability of Manitoba Telephone on the balance sheet of the household sector.

### 3. Labour Income

#### 3.1 Retirement Allowances

**Issue:** Are retirement allowances an element of labour income? If so, should they be included in wages and salaries or supplementary labour income (SLI)?

**Pre-Revision Treatment:** Retirement allowances, designated as 'retiring allowances' by Revenue Canada, were left out of labour income. It was not until Revenue Canada began capturing data from the T4A Form in 1990 that any hard data became available on retirement allowances.

**Discussion Notes:** Retirement allowances made by employers to employees are definitely labour costs and should be included in labour income. The question was whether to include them in wages and salaries or SLI. The argument leaned toward SLI (see 1993 SNA, paragraph 7.35c) but not without reservations. Another option was to develop a third category of labour income that could be described as unfunded benefits. This category would include retirement allowances and other lump sum payments such as maternity benefits and special leaves, all paid by the employers. Given the data limitations, it was recommended not to create this new category but rather to treat retirement allowances as a new element of SLI.

**Change:** Retirement allowances are now included in SLI beginning with 1990. Prior to that year, source data are not available.

#### 3.2 Employer Payroll Tax – Ontario and Quebec

**Issue:** Should employer payroll taxes be included in SLI or treated as indirect taxes?

**Pre-Revision Treatment:** The welfare component of SLI included the payroll taxes paid by employers in Ontario and Quebec.

**Discussion Notes:** It was felt that any employer contribution not giving a specific economic benefit to the employee or his dependents should be considered an indirect tax, and not SLI. This would be in line with the 1993 SNA recommendation of treating payroll taxes on production the same way as taxes on buildings, land and other assets used in production (paragraph 7.21).

**Change:** The Ontario and Quebec employer payroll taxes are now excluded from the welfare component of SLI from the inception of each province's payroll tax scheme and classified as taxes on production.

#### 3.3 Workers' Compensation – Hospital and Medical Expenditures

**Issue:** Should hospital and medical expenditures made by the workers' compensation boards on behalf of workers be deducted from their assessment revenue in estimating

employers' contributions to workers' compensation?

**Pre-Revision Treatment:** These expenditures were deducted from assessment revenue.

**Discussion Notes:** Given that the provincial workers' compensation boards are wholly funded by employers' contributions, hospital and medical expenditures made by the Boards on behalf of workers should not be deducted from assessment revenue in estimating employers' contributions to workers' compensation. Recent documentation received from the Ontario Workers' Compensation Board confirmed that the Board was responsible for the costs of all services provided to an injured worker. Payments for medical and hospitalization costs are made directly out of assessment revenue and employers are not billed separately.

**Change:** Hospital and medical expenditures are no longer deducted from the assessment revenue of workers' compensation boards in estimating employer contributions, starting in 1961.

### 3.4 Workers' Compensation – Unfunded Liabilities

**Issue:** Should surcharges levied on employers for unfunded liabilities of workers' compensation boards be treated as SLI?

**Pre-Revision Treatment:** Surcharges of this type were not treated as SLI.

**Discussion Notes:** In recent years, provincial workers' compensation boards have levied surcharges on employers for unfunded liabilities. It was recommended that these amounts be included in SLI.

**Change:** Surcharges levied on employers for unfunded liabilities of workers' compensation boards are now included in SLI.

### 3.5 Interest on Overdue Employers' Contributions to Pensions

**Issue:** Should interest on late payments of employers' contributions to pension funds be treated as SLI?

**Pre-Revision Treatment:** The interest levied by pension funds on late payments of employers' contributions has not been included in SLI since 1985.

**Discussion Notes:** Research has shown that only a few employers have late payment charges levied on them by the pension funds on a regular basis. Among them are the governments of Ontario and Quebec. These interest charges, although not legitimate contributions, are included in the reported contributions. It may be advantageous for an employer to pay the interest charge levied by the pension fund, instead of borrowing money to meet its obligations. This practice is not prevalent among employers. Those



operating in this fashion are simply using this practice to finance their operations.

**Change:** Interest on late payments of employers' contributions to pension funds has now been excluded from SLI for the whole historical period. See also Item 2.6.

### 3.6 Fishing – Adjustment for Undercoverage

**Issue:** Should an undercoverage adjustment be made to the T4 Control total for wages and salaries earned in fishing?

**Pre-Revision Treatment:** The adjustment for fishing was the difference between the estimate of wages and salaries in the fishing industry (called the 'industry benchmark') and the wages and salaries reported on the T4 file by employers classified in the fishing industry. The industry benchmark was based on the value of fish caught and price indexes for fuel and fish.

**Discussion Notes:** The T4 Control total adjustment represented the earnings of workers on owner-operated boats who were not issued a T4, but a T4F instead by the owner, designated as employer. If the owner was not a designated employer, no T4F was issued. Fishermen not receiving a T4, whether they received a T4F or not, were instructed to declare themselves as 'self employed' with fishing income on their T1 declaration. The estimate for net income of unincorporated businesses from fishing comes from the T1 file. As a result, the adjustment for undercoverage was actually a double count, the same amount being recorded as labour income and net income from fishing.

**Change:** The T4 total has now been accepted as fully representing the wages and salaries in the fishing industry and the T4 Control total adjustment has been eliminated from 1981 onward.

### 3.7 Insurance Agents' Commissions – Adjustment for Undercoverage

**Issue:** Should an undercoverage adjustment be made to the T4 Control total for commissions of life insurance agents?

**Pre-Revision Treatment:** Such an adjustment was made to the T4 Control total.

**Discussion Notes:** This adjustment represented the commissions of life insurance agents who are not issued a T4. Only agents whose employer deducts CPP/QPP and/or income tax receive a T4. The others receive a T4A and declare themselves as self-employed (i.e. independent agents) with commission income in their T1 declaration. According to documentation dating from 1976, independent agents' earnings should not be part of wages and salaries, but were included since they appeared to be not covered elsewhere. The adjustment (\$617 million for 1993) was based on a dated study from the Superintendent of Insurance indicating that 50% of agents had 'self-employed status', while the other 50% had their CPP contributions remitted by their employer.

Commission income is part of the net income of unincorporated business. As a result, the adjustment for undercoverage was actually a double count, the same amount being recorded as labour income and net income from insurance commissions.

**Change:** The T4 Control total adjustment for undercoverage of insurance commissions has now been eliminated back to 1965, date of inception of the T4 Supplementary File.

### 3.8 Tips – Adjustment for Undercoverage

**Issue:** Should an undercoverage adjustment be made to the T4 Control total for tips?

**Pre-Revision Treatment:** Estimates for tips on meals outside the home, accommodation as well as hairstyling and beauty services were added to the T4 Control total, as the tips were deemed unreported to taxation authorities.

**Discussion Notes:** There was no concern with the rationale of the adjustment. However, it was found that the earlier estimate for tips on hairstyling and beauty services was too high in light of the T4 total for wages and salaries in this industry. It was also recommended expanding the adjustment to include tips received by porters and baggage carriers at railway stations.

**Change:** The adjustment for tips on meals, accommodation and hairstyling has been expanded to include porters and baggage carriers at railway stations. As well, there was a major downward revision in the estimate of tips on hairstyling and beauty services.

### 3.9 Provincial Distribution of Wages and Salaries

**Issue:** How far back should the provincial distribution of wages and salaries in the production account (i.e. in provincial GDP) be based on the province of employment as reported in the T4 file?

**Pre-Revision Treatment:** Beginning with 1985, the provincial distribution of wages and salaries has been based on the province of employment as reported on the T4 file. For the earlier period, however, it was based on industrial surveys and several other sources, but none as reliable as the 'Province of employment' box on the T4 form.

**Discussion Notes:** Conceptually, estimates of wages and salaries for the production account should reflect where the production takes place, that is, the province of employment. Statistically, the most reliable source for that information is the T4 file. It was agreed to take back the estimates based on province of employment to 1981. For the period from 1961 to 1980, the provincial distribution of wages and salaries should remain based on industrial surveys and other sources. Resource and time constraints make it difficult to reconstruct the series prior to 1981. The break will remain between 1980 and 1981.

**Change:** The provincial distribution of wages and salaries for the production account is now based on the province of employment as reported on the T4 file back to 1981.

### 3.10 Canadian Employees in Foreign Embassies and Consulates

**Issue:** Should wages and salaries paid to Canadian workers in foreign embassies and consulates in Canada be included in labour income and thus, in Canadian GDP and, if so, under which sector?

**Pre-Revision Treatment:** These wages and salaries were included in labour income and were recorded under a sub-component of the Government sector.

**Discussion Notes:** Wages and salaries paid to Canadians employed by foreign embassies and consulates in Canada were estimated at \$132 million for 1993. Recent research has indicated that the estimate was about \$100 million too high. There was also doubt whether these factor payments should be (a) included in GDP and (b) under a sub-component of the Government sector, since they were made by non-resident units. It was agreed to continue including them in labour income (and thus in Canada's GDP) and treating them as exports of services. The workers involved should be deemed hired by a domestic institutional unit that sells their services to foreign embassies for an amount equivalent to their wages and salaries. This notional unit should be classified in the business sector.

**Change:** Wages and salaries paid by foreign embassies and consulates are still considered part of labour income and thus of Canada's GDP and still treated as export of services. However, they are now deemed paid by a notional unit classified in the business sector. Finally, the estimates have been substantially lowered.

### 3.11 Insurable Earnings of Status Indians

**Issue:** Should insurable earnings of Status Indians be added to the T4 Control total, since employers of Status Indians are not obliged to report their employment income?

**Pre-Revision Treatment:** No adjustment was made to the T4 Control total in this case.

**Discussion Notes:** Indian Band Councils issued T4 slips for wages and salaries totaling about \$445 million in 1993. This amount represents the employment income of Status Indians who have elected to contribute to CPP, as well as that of other employees. However, Indian Band Councils did report for the same year \$347 million in insurable earnings for the purpose of employment insurance by Status Indians for whom they reported no employment income.

**Change:** Insurable earnings of Status Indians working for Indian Band Councils are now added to the T4 Control total to represent a minimum estimate of labour income of First Nations peoples on reserves.



## 4. Capital Formation

### 4.1 Transfer Costs on the Sale of Existing Dwellings

**Issue:** Should a new benchmark be constructed for transfer costs on the sale of existing dwellings?

**Pre-Revision Treatment:** Transfer costs on the sale existing dwellings had been projected from a 1971 benchmark using multiple listing service sales, blown up to represent total sales of existing houses. Due to lack of documentation, it was unclear whether the benchmark included all transfer costs (real estate commissions, legal fees, inspection fees, etc.).

**Discussion Notes:** The 1993 SNA notes: "New fixed assets acquired by purchase are valued at purchasers' prices: that is, including not only all transport and installation charges but also all costs incurred in the transfer of ownership in the form of fees paid to surveyors, engineers, architects, lawyers, estate agents, etc., and any taxes payable on the transfer" (paragraph 10.37). The same logic applies to used assets. Therefore all transfer costs, not only real estate commissions, should be capitalized.

At the time of the 1986 CSNA Historical Revision, it had been decided to capitalize only real estate commissions on residential construction and to include the legal fees and other fees related to the transfer of used residential fixed assets in household consumption expenditure.

**Change:** A new benchmark for transfer costs on the sale of existing dwellings was constructed. It includes real estate commissions, legal fees and all other fees related to the transfer of used residential fixed assets.

### 4.2 National Defence Purchases of Non-Military Equipment and Structures

**Issue:** Should the CSNA treat non-military equipment and structures purchased by the Department of National Defence as gross fixed capital formation, as recommended in the 1993 SNA?

**Pre-Revision Treatment:** Department of National Defence spending on equipment and structures was treated as current spending.

**Discussion Notes:** The 1993 SNA states that military destructive weapons and their supporting systems should not be treated as fixed assets since "they are not in fact used repeatedly or continuously in production. Although durable, they are single-use goods." Vehicles and equipment such as warships, military aircraft, tanks, missile carriers and launchers, etc., used to deliver such weapons should not be treated as fixed assets either. Other structures and equipment used by the military such as

airfields, docks, roads, hospitals, transport aircraft, etc., that can also be used for civilian purposes should be considered fixed assets. (Paragraphs 10.65-10.68)

**Change:** The 1993 SNA recommendation of treating non-military equipment and structures used for defence purposes as fixed assets has been adopted by the CSNA and the Investment and Capital Stock Division.

### 4.3 Capital Items Charged to Operating Expenses

**Issue:** Should the CSNA continue to make an upward adjustment to the capital spending on machinery and equipment reported by businesses for the capital items they charge to operating expenses (abbreviated as CICOE)?

**Pre-Revision Treatment:** CICOE estimates have been included in investment in machinery and equipment starting with 1947. The estimates were calculated by the Investment and Capital Stock Division as a percentage of total new investment in machinery and equipment in three industry groups (manufacturing 10%, utilities 1.3%, and trade 8%). In 1990, they amounted to \$2.2 billion for manufacturing, \$0.2 billion for utilities and \$0.2 billion for trade. This adjustment of \$2.6 billion in 1990 compared to a total of \$46.5 billion for investment in machinery and equipment excluding CICOE.

**Discussion Notes:** The 1993 SNA does not explicitly address the issue of adjusting reported capital expenditures for items which should be capitalized, but may appear as current expenses on company books. It does state however: "Some goods may be used repeatedly, or continuously, in production over many years but may nevertheless be small, inexpensive and used to perform relatively simple operations. Hand tools such as saws, spades, knives, axes, hammers, screwdrivers and spanners or wrenches are examples. If expenditures on such tools take place at a fairly steady rate and if their value is small compared with expenditures on more complex machinery and equipment, it may be appropriate to treat the tools as materials or supplies used for intermediate consumption. Some flexibility is needed, however, depending on the relative importance of such tools. In countries in which they account for a significant part of the value of the total stock of an industry's durable producers' goods, they may be treated as fixed assets and their acquisition and disposal by producers recorded under gross fixed capital formation." (Paragraph 10.64).

Documentation on the existing estimate was hard to find. A recommendation made in the 1950's was apparently the only basis for this continuing adjustment since then. Given the lack of justification and the difficulty of making reliable estimates, it was recommended to discontinue this adjustment for CICOE and to undo it for the entire period subject to the historical revision.

**Change:** The adjustment for capital items charged to operating expenses has now been removed from the investment and capital stock series for the entire historical period.



## 4.4 Expenditures on Mineral Exploration

**Issue:** Should expenditures on mineral exploration be capitalized, as recommended in the 1993 SNA?

**Pre-Revision Treatment:** Most spending on mineral exploration was already capitalized in the CSNA. However, general exploration expenditures undertaken by a mining company on own account or by a mineral exploration company on contract, as well as geological and geophysical expenses incurred in the exploration of petroleum and natural gas were not capitalized.

**Discussion Notes:** The 1993 SNA notes: "Mineral exploration is undertaken in order to discover new deposits of minerals or fuels that may be exploited commercially. Such exploration may be undertaken on own account by enterprises engaged in mining or the extraction of fuels. Alternatively, specialized enterprises may carry out exploration either for their purposes or for fees. The information obtained from exploration influences the production activities of those who obtain it over a number of years. The expenditures incurred on exploration within a given accounting period, whether undertaken on own account or not, are therefore treated as expenditures on the acquisition of an intangible fixed asset and included in the enterprise's gross fixed capital formation." (Paragraph 10.90).

"The expenditures included in gross fixed capital formation include not only the costs of actual test drillings and borings, but also the costs incurred to make it possible to carry out tests, for example, the costs of aerial or other surveys, transportation costs, etc. The value of the resulting asset is not measured by the value of new deposits discovered by the exploration but by the value of the resources allocated to exploration during the accounting period." (Paragraph 10.91).

**Change:** All exploration expenditure as well as geological and geophysical expenditures are now capitalized.

## 4.5 Progress Payments for Machinery and Equipment

**Issue:** Should progress payments towards the purchase of machinery and equipment be treated as fixed capital formation as they occur, or should they be treated as work-in-progress by the producer and recorded as capital formation by the purchaser only when the equipment is delivered? In particular, should progress payments received from (or paid to) non-residents be recorded in the current account (i.e., be treated as an export or import) or in the financial account (acquisition of a financial claim)?

**Pre-Revision Treatment:** Progress payments were originally treated as gross fixed capital formation throughout the System. In effect, ownership of the equipment was deemed to be transferred with each payment. However, since 1992, the Balance of Payments Division has considered the production financed by progress payments as an addition to work-in-progress, and the progress payments from non-residents to



Canadian producers (and *vice versa*) as financial claims. Such payments are now recorded in the financial account of the Balance of Payments as they occur. The value of the export (or import) is recorded in full in the current account when the good being purchased crosses the border (i.e., when the financial claim is extinguished).

Thus, there has been an inconsistency between the Income and Expenditure Accounts and Balance of Payments since 1992. The discrepancy has usually been small for exports, as few Canadian goods are purchased through progress payments, but has been large at times for imports of machinery and equipment.

**Discussion Notes:** The 1993 SNA notes that work-in-progress is treated in the System as one component of inventories of outputs held by producers. However, the borderline between inventories of partially completed structures and equipment on the one hand and gross fixed capital formation on the other is not clear. Gross fixed capital formation occurs when the ownership of the assets is transferred from their producers to their users. The legal transfer of ownership may actually take place in cases where stage payments are made by the purchaser, and these can often be used to approximate the value of the gross fixed capital formation. In the absence of a contract of sale, the output produced must be treated as additions to the producer's inventories, i.e., as work-in-progress, however large the partially completed structure may be. (Paragraph 6.74).

The CSNA is in agreement with the above recommendation. However, its implementation is not practical in the case of domestic transactions.

**Change:** The CSNA has made an adjustment to exclude the progress payments from capital formation in machinery and equipment when they involve transactions between residents and non-residents for the whole period under review. See also Item 5.2. Due to data constraints, progress payments from one resident producer to another continue to be treated as capital formation.

#### 4.6 Financial Leasing

**Issue:** Should the 1993 SNA recommendation of allocating capital goods bought under finance leases to the industry of the user (lessee) rather than that of the owner (lessor) be adopted?

**Pre-Revision Treatment:** Capital goods acquired under finance leases were allocated to the industry of the lessor. The rental receipts of lessors (usually classified to the 'other finance' industry) consisted mainly of interest received and depreciation on the leased capital equipment.

**Discussion Notes:** Financial leases are characterized by the fact that all the risks and rewards of ownership are, *de facto*, transferred from the legal owner of the good, the lessor, to the user of the good, the lessee (1993 SNA, paragraphs 6.118 and 6.119). In order to capture the economic reality of such arrangements, a change of ownership

from the lessor to the lessee is deemed to take place. The lessor is treated as making a loan to the lessee, which enables the latter to finance the acquisition of the equipment.

The 1993 SNA recommendation on financial leasing is difficult to implement with respect to the business and government sectors because of lack of data. There are two potential sources of information, the lessor and the lessee. The lessors generally report their purchases of equipment in the Capital Expenditure Survey. The lessees generally do not, because they do not consider leased equipment as part of their capital expenditure. For instance, the response to a question added in the 1992 Capital Expenditure Survey on the acquisition of buildings and equipment through a financial lease was very low. As a result, the total capital formation financed through financial leases is accurate, but because it is reported by the lessors instead of the lessees, its industrial distribution can be misleading. Thus, purchases of aircraft tend to be reported under the financial industry instead of the transportation industry, which leads to inadequate measures of multifactor productivity by industry.

However, there is enough information to allocate to the lessees vehicles purchased through financial leasing in the personal sector. In this case, the 1993 SNA recommendation can be implemented. See also Item 6.2.

**Change:** Motor vehicles acquired under finance leases have now been allocated to the using sector. See also Item 6.2. All other capital goods acquired under finance leases in the business and government sectors continue to be allocated to the industry of the owner.

#### 4.7 Petroleum Incentive Payments Program

**Issue:** Should depreciation be estimated on expenses for the drilling of unproductive wells financed with grants from the Petroleum Incentive Payments (PIP) Program?

**Pre-Revision Treatment:** Investment on unproductive wells drilled with the help of PIP grants was assumed to depreciate over ten years in the CSNA. The estimate was made even though neither the government (the payer) nor the company receiving the grant was depreciating the value of the investment. This approach yielded an estimate of value added even when there was no production.

**Discussion Notes:** The PIP program provided grants (capital transfers) to encourage companies in drilling wells. Many of the wells drilled were unproductive and were written off.

The depreciation of unproductive investment that had been financed through PIP grants yielded a gross surplus where none existed. There were two options: to record depreciation and a corresponding loss, with value added equal to zero, or to record no depreciation and no loss, with value added still zero. The second alternative was recommended as it better reflected how businesses viewed this type of transaction.

**Change:** The estimate of depreciation on investment supported by PIP grants (capital transfers) for drilling wells which turn out to be unproductive has been eliminated.

#### **4.8 Capital Consumption in the Government Sector**

**Issue:** Should the CSNA follow the 1993 SNA recommendation to impute capital consumption allowances (CCA) on the capital stock of the government sector?

**Pre-Revision Treatment:** The CSNA has always imputed CCA on the capital stock of the government sector, except on that of the Department of National Defence.

**Discussion Notes:** Some argue that it is a mistake to impute CCA on government capital, as such an imputation artificially increases the value of GDP.

The 1993 SNA, however, recommends not only continuing to impute CCA on the capital stock of government sector civilian establishments, but also extending the imputation to the non-military equipment and structures purchased by the Department of National Defence. This recommendation was implemented in the last historical revision of the U.S. national accounts in 1995. Fixed assets should be treated consistently, whether purchased by the government sector or the private sector. One would not imagine ignoring the cost of capital consumption in the valuation of private sector output. It should not be ignored either in the valuation of government sector output. The addition of CCA on non-military equipment and structures does not 'artificially' increase GDP. Rather, it should be seen as the correction of a previous 'artificial' undervaluation of GDP. The inclusion of an imputation for CCA in the current expenditure of the government sector has no impact on the sector's net lending or borrowing.

CCA should now also be imputed on non-military equipment and structures purchased by the Department of National Defence, since they are now treated as part of gross fixed capital formation and capital stock (see Item 4.2 above). However, imputations for CCA should be shown explicitly to allow users to remove them if desired.

**Change:** The imputation of CCA on the capital stock of civilian establishments of the government sector has now been extended to non-military equipment and structures of the Department of National Defence.



## 5. International Trade

### 5.1 Point of Valuation of Trade in Goods

**Issue:** Should the recommendation of the 1993 SNA and the IMF's *Balance of payments Manual*, 5<sup>th</sup> edition (BPM-5), to value trade in goods at the border of the exporting country for both imports and exports be adopted?

**Pre-Revision Treatment:** The basic customs data on goods compiled by the International Trade Division were valued at the plant (place of direct shipment to Canada) for imports, and at the border for exports. The Balance of Payments Division (BOPD) then made adjustments to the customs data to express the value of exports at the plant (place of direct shipment from Canada) and to reflect conceptual differences with respect to the timing and coverage of transactions or to the change of ownership of goods.

**Discussion Notes:** Both the 1993 SNA (paragraphs 14.36-14.38 and 15.35) and the BPM-5 (paragraphs 219 ff.) recommend valuing the trade in goods at the border of the exporting country. Adopting a valuation at the border represents a significant shift between the goods and services accounts for both exports and imports. The transportation charges from plant to border (known as inland freight) were always recorded as trade in transportation services. For exports of wheat and natural gas, however, freight charges were recorded as part of the valuation of the trade in these goods. Shifting inland freight from 'services' to 'goods' would align Canada's practice with that of other countries (including the U.S.).

**Change:** The recommendation of the 1993 SNA and the BPM5 to record the value of exports and imports of goods f.o.b. at the border of the exporting economy has been adopted. See also Item 8.5.

### 5.2 Progress Payments on Imported Capital Goods

**Issue:** Should progress payments on imported capital goods be treated as gross fixed capital formation or as financial claims?

**Pre-Revision Treatment:** Progress payments on both domestically-produced and imported capital goods were treated as part of gross fixed capital formation in the Income and Expenditure Accounts, as well as in the Input-Output Tables. They were recorded as financial claims in the Balance of Payments, except for government payments.

**Discussion Notes:** Progress payments represent legal claims in respect of financial assets and should be recorded in the financial account. To record them otherwise would give rise to difficulties in the reconciliation of Canada's trade estimates with those of

other countries. The gross capital formation should be recorded when the goods are effectively acquired by the unit that intends to use them (1993 SNA, paragraph 10.81), that is, when the capital is put in service.

**Change:** Progress payments are now treated as financial claims, as recommended by the 1993 SNA. See also Item 4.5.

### 5.3 Trade in Goods for Processing

**Issue:** The 1993 SNA and the BPM-5 recommend, on practical grounds, recording all goods imported for processing and then re-exported as trade in goods. Should this treatment be adopted?

**Pre-Revision Treatment:** Two commodities, uranium and gold, were treated differently from others in the Canadian Balance of Payments when they entered Canada for processing. Uranium was valued in imports and exports of goods at its 'pre-processing price', while charges for upgrading it were recorded in exports of services. The value of gold imported and later re-exported was deducted from trade in goods as reported on Customs documents, because the foreign client typically retained ownership of the gold. Only the upgrading charges on the imported gold were recorded in exports of services. Due to insufficient data, the processing of other commodities was not recorded separately in services. The original import of the commodities was recorded in goods and their subsequent re-export after processing was also recorded in goods, at a higher value.

**Discussion Notes:** The adoption of the treatment recommended in the 1993 SNA (paragraphs 14.61-64, 11.65 and 14.93) and the BPM-5 (paragraphs 197, 198, 436, 438, 439), namely that a change of ownership is deemed to occur when goods are cleared at the border, would streamline the recording of Canada's trade in goods.

**Change:** The recommendation of the 1993 SNA and the BPM-5 with respect to goods for processing has been adopted.

### 5.4 Reconfiguration of the Travel Account

**Issue:** The BPM-5's new standard on international travel (1) continues to include a broad range of travelers' goods, (2) includes all outlays related to travel for educational and medical purposes, (3) transfers passenger fares to the transportation account, and (4) makes a new distinction between business and personal travel. Should the CSNA adopt all or some of its recommendations?

**Pre-Revision Treatment:** The BOPD recorded under 'travel' (a) travelers' spending on hotels, restaurants, etc. (this overall estimate was broken down into several categories of goods and services on the payments side, but not on the receipts side), (b) passenger fares paid by Canadians to foreign carriers, and *vice versa*, and (c) certain out-of-pocket expenses of individuals indicating education or health as the purpose of

travel. It excluded from 'travel' (a) tuition and living expenses of students, recorded under 'other services', and (b) medical expenses of Canadian travelers covered by provincial insurance plans, recorded under 'government services', as well as payments from non-residents to Canadian hospitals. Finally, it made no distinction between business and personal travel.

**Discussion Notes:** The reconfiguration of the travel account according to the BPM-5 (paragraphs 241-251) is essentially a data issue and most of it can be accomplished. The Education, Culture and Tourism Division, which collects and publishes the data on international travel, has agreed to adopt the new definition of spending on travel. This avoids the risk of two sets of estimates on international travel being published by Statistics Canada.

**Change:** The reconfiguration of the travel account according to the BPM-5 was carried out in two stages. With the release of the BOP for the first quarter of 1996, revisions were incorporated from 1994 onwards. The changes were made for the entire historical period with the release of the BOP Historical Revision in June 1997.

## 5.5 New Breakdown of Commercial Services

**Issue:** To what extent should the new breakdown of commercial services suggested in the BPM-5 be implemented?

**Pre-Revision Treatment:** The Canadian Balance of Payments has in recent years published annual estimates for some 25 categories of services other than 'travel' and 'government'. The 25 categories comprised three headings under 'freight and shipping', two under 'miscellaneous services' and the remainder, under 'business services'.

**Discussion Notes:** Under the new presentation recommended in the BPM-5 (paragraphs 158-168; 230-240; 252-266; Appendix 3), 'transportation' would gain 'passenger fares' from 'travel' and 'transport-related services' (mainly airline support), from business services; at the same time, it would lose 'inland freight', shifted to goods. The addition of new estimates developed in the U.S. for truck transportation should be considered. 'Ocean freight', 'inland water freight' and some other items would need to be combined for reasons of data availability and confidentiality (the BPM-5 calls for ocean freight to be broken down between passenger, freight and other). Construction would become a new category, requiring separate estimation; 'information services' would need greater coverage. Estimates for the new category 'merchandising' would be difficult to construct, not only on account of the treatment of merchandising itself (e.g., netting) but because some merchandising commissions may already be included in goods trade. New estimates would have to be developed for legal and management services. The 'other services' category would lose 'student expenditures' to 'travel', and 'organized sports and performing arts activities' to the new category 'personal, cultural and recreational services'. A significant data problem would remain in the case of auto tooling.



**Change:** A modified version of the new classification was implemented at the time of the release of the BOP for the first quarter of 1996, with the major exception of the shifting of inland freight from the transportation account to the goods account. This was carried out in June 1997, along with the extension of the coverage of ocean freight and insurance and the addition of new estimates for (a) truck transportation beyond the border, (b) legal and management services, and (c) starting in 1990, construction services. Many trade commissions were left in goods, and auto tooling continues to be treated as a service rather than a good. The new classification facilitates international comparisons and can be more easily matched with the revised input-output classification of goods and services.

## 6. Household Consumption Expenditure

### 6.1 Classification of Individual Consumption by Purpose (COICOP)

**Issue:** Should the CSNA implement the international Classification of Individual Consumption by Purpose (COICOP)?

**Pre-Revision Treatment:** The Classification of Household Goods and Services (CHGS) of the 1968 SNA was used to classify household consumption expenditure.

**Discussion Notes:** The COICOP referred to in the 1993 SNA (paragraphs 9.63 and 18.1) was further developed by the OECD and its revised draft was submitted to the National Accounts Experts Meeting held in Geneva, April 29 - May 2, 1996. The COICOP would replace the CHGS of the 1968 SNA used to classify household consumption expenditure (referred to as 'personal expenditure' in the CSNA). Note that the COICOP is really a functionalization of the actual individual consumption of households and not just their consumption expenditures.

**Change:** The CSNA has adopted the COICOP, keeping in mind the need for historical continuity in the categories of household expenditure in both the Income and Expenditure Accounts and the Input-Output Tables.

### 6.2 Leasing in the Household sector

**Issue:** Should the CSNA follow the 1993 SNA recommendation to allocate capital goods purchased by households under financial leases to the household sector?

**Pre-Revision Treatment:** Household expenditure on vehicles was equal to total motor vehicle sales, less 'fleet purchases' (i.e., purchase of several vehicles at a time), presumably all made by business, less the estimated business use of vehicles purchased by persons, plus the estimated personal use of vehicles purchased by business. Since the survey on retail sales of motor vehicles covered financial leasing, part of the value of vehicles leased to persons under a financial lease was implicitly included in household expenditure. The value of these vehicles was also included in the capital formation of the finance leasing companies, leading to a double count.

Household consumption expenditure also included, as a current service expense, rental payments made under an operating lease along with lease payments made under a financial lease. These estimates of combined spending on motor vehicle renting and leasing were based on the Family Expenditure Survey.

**Discussion Notes:** It was agreed to apply the same convention to all leases: those greater than one year would be treated as financial leases (as a capital loan to the consumer buying the good); those less than one year would be considered as operating

leases. The full value of vehicles purchased by the household sector under financial leases is to be included in household consumption and deducted from capital formation.

The decision to record the full value of vehicles purchased under financial leases in household consumption requires that the lease payments on these vehicles no longer be treated as a current service expenditure. The payment for operating leases would still be considered as current service expenditure.

Note that the calculation of the value-added taxes (GST and HST) on leased vehicles must be based on the lease payments, not on the total value of the vehicles recorded in household expenditure under financial leases.

**Change:** The CSNA has adopted the 1993 SNA recommendation. See also Item 4.6.



## 7. Financial Services and Insurance

### 7.1 Financial Intermediation Services Indirectly Measured (FISIM) – Allocation

**Issue:** Should the CSNA adopt the 1993 SNA recommendation of allocating a FISIM output to all users?

**Pre-Revision Treatment:** The CSNA has always tried to allocate the FISIM output produced by the various financial corporations to the sectors using the services. However, FISIM provided by trust companies, credit unions and consumer loan companies was all allocated to the household sector. No FISIM was calculated for security and investment dealers that are subsidiaries of banks, and therefore no FISIM was allocated to the users of their services, on the belief that they charged explicitly for all their services. While trust and mortgage companies have dealings with the government sector, their intermediation services were not allocated to that sector.

**Discussion Notes:** The 1993 SNA recommends that FISIM output be allocated to all sectors using financial intermediation services, that is, businesses, households, governments and the rest of the world (paragraph 6.125). The FISIM attributed to businesses represents an intermediate expense for them and therefore does not affect the level of GDP, while that attributed to the household and government sectors, which are final demand sectors, is part of GDP. This recommendation is controversial, as it represents a major departure from the 1968 SNA. For this reason, the 1993 SNA shows flexibility in proposing several modalities of application, including the option of not allocating any FISIM output to final demand (paragraph 6.126), a treatment equivalent to that of the 1968 SNA. The CSNA does not support this option.

It is unclear why the FISIM output of credit unions, trust companies and consumer loan companies was entirely allocated to the household sector, as these financial institutions also deal with the other sectors. Credit unions and trust companies, in particular, make substantial mortgage loans, which by definition are transactions with business. Likewise, the assumption that investment and security dealers always charge explicitly for their services must be reviewed, as banks and investment dealers have become more integrated. Although investment dealers do not take deposits, they take part in activities similar to financial intermediation, much like consumer loan companies.

**Change:** The CSNA has continued using the methodology outlined in 1993 SNA for estimating the FISIM of banks, and has now extended it to all other financial corporations, i.e. trust, mortgage and consumer loan companies, as well as credit unions. The FISIM on mortgages and other business transactions of credit unions has now been shifted from household consumption to intermediate consumption, leading to a reduction in GDP. The total output of credit unions was not affected. FISIM is now calculated on government deposits in all financial corporations and on government borrowing from all financial corporations.

## 7.2 FISIM – Reference Rates

**Issue:** Should the CSNA adopt the 1993 SNA recommendation to use reference rates for distributing FISIM between borrowers and depositors and further allocating the resulting amounts among sectors (households, government, business and non-residents)?

**Pre-Revision Treatment:** FISIM output was split between borrowers and depositors on the basis of outstanding loans and deposits. The FISIM attributed to each was further broken down by sector according to each sector's share of the total loans and deposits. The method relied on the assumption that a dollar borrowed or lent resulted in an identical service and that all sectors paid the same service rate for FISIM.

**Discussion Notes:** The 1993 SNA defines a reference interest rate as one which "represents the pure cost of borrowing funds - that is, a rate from which the risk premium has been eliminated to the greatest extent possible and which does not include any intermediation services" (paragraph 6.128).

The reference rate would lie in between the 'average' interest rates given to borrowers and depositors. For example, if the average rate paid on deposits was 5% and the one demanded on loans was 7%, the reference interest rate would lie in between at, say, 6%. In this case, the margin earned would be 1% on both deposits and loans. To simplify the calculation, a single rate could be applied to all instruments (different types of loans and deposits). However, this could result in the service portion of the interest (or the margin earned) being negative in some cases. This could occur when a long-term interest rate was lower than the current one. The problem with a single rate was that it only represented one point in time. Therefore, it might be necessary to use several reference rates to accurately estimate FISIM.

It should be noted that banks engage in numerous cross-term transactions. Thus, a bank may be willing to break even or even lose money on one instrument so that larger profits can be made elsewhere. This practice influences the levels of various reference rates.

For chartered banks, calculations were done (a) with a single reference rate (the midpoint between the rate of return on all assets and the one on all liabilities) and (b) three different rates for each instrument (e.g. mortgages, consumer loans, etc.), one for short-term loans and deposits, one for medium-term, and the other for long-term instruments. In the case of deposits, the single and multiple rates yielded similar results with respect to the split of FISIM by sector. In fact, the results were very similar to those obtained under the old method, where the percentage of assets in each sector was used to determine the split, except for securities. The split of FISIM on loans by sector was very sensitive to the choice of rate. The single rate method was easy to calculate, a useful feature when estimates need to be calculated quarterly in a very short time, but resulted in negative values and in large swing between sectors, especially when long-term rates on deposits and loans changed quickly. The multiple rate method resulted in



few negative values and in smaller sectoral shifts. In conclusion, the use of more than one reference rate increases the complexity of calculations but seems to yield more sensible results.

These results were obtained using data on chartered banks, since there was no detailed information for other financial corporations. However, they could serve to split the FISIM of other financial corporations by sector.

**Change:** The split of FISIM output between depositors and borrowers is now based on the total value of deposits and loans outstanding. The FISIM attributed to depositors is split by sector according to each sector's share of deposits. The split of FISIM on loans is obtained by the multiple reference rate method.

### 7.3 FISIM – International Trade

**Issue:** Should the CSNA adopt the 1993 SNA recommendation to allocate FISIM to international trade?

**Pre-Revision Treatment:** No FISIM output was allocated to international trade in the CSNA.

**Discussion Notes:** It is not known why no FISIM was attributed to international trade. The 1993 SNA is clear on the issue: "...an allocation should also be made to non-resident borrowers and lenders. These allocations together appear as exports of FISIM in the rest of the world account. Similarly, an element of FISIM should be shown as payable to non-resident financial corporations by resident borrowers and lenders. Together, these elements should appear as imports of FISIM in the rest of the world account." (Annex III, paragraph 4).

The IMF's BPM-5 states that "such imputations are equivalent to reclassifying a portion of interest as financial services. As a reflection of the views of national balance of payments compilers, this procedure is not recommended in this Manual. As a result, these implicit services are reported indistinguishably under investment income (interest)" (BPM-5, footnote to paragraph 258). This is an instance where the 1993 SNA and BPM-5 diverge.

**Change:** The CSNA has implemented the 1993 SNA recommendation of allocating FISIM to international trade (both exports and imports). The Canadian Balance of Payments, on the other hand, follows the IMF's BPM-5 recommendation not to do so. The difference between the two is shown as a reconciliation item.

### 7.4 FISIM – Own Funds

**Issue:** Should the CSNA adopt the 1993 SNA recommendation not to include financial intermediaries' own funds in the calculation of FISIM?



**Pre-Revision Treatment:** The value of FISIM was estimated as total property income received (excluding income from securities) less interest paid. This approach automatically entailed the inclusion of income earned on own funds.

**Discussion Notes:** The 1993 SNA suggests that financial intermediaries' own funds should not be included in the calculation of FISIM "as such income does not arise from financial intermediation" (paragraph 6.125). Although the lending of own funds by a financial corporation cannot be precisely defined as FISIM, the borrowers of these funds still receive a service from a financial corporation. As well, the view that own funds generate financial services is gaining acceptance, as demonstrated in the various papers on FISIM prepared by Eurostat.

As is the case with other intermediated funds, loans made from own funds consist of a 'transfer' portion (the pure rate of borrowing money) and a service portion. Therefore the global estimate of FISIM (i.e., interest received minus interest paid), which includes interest received from own funds but no interest paid, should be adjusted for this transfer portion. For example, if a financial intermediary lends \$1000 of his own funds for which he receives \$100 in interest, only a portion of this interest can be considered a service, and therefore the output of a financial intermediary. If the value of the service is estimated at \$20, the remaining \$80 should be removed from the FISIM total.

**Change:** The CSNA has continued to include own funds in the calculation of FISIM, and thus rejects the 1993 SNA recommendation. However, the CSNA has amended its methodology so that only the borrower's portion of service charges remains in the FISIM calculation. This new treatment of own funds now applies to all financial corporations, including consumer loan companies, to avoid an overestimation of the output of financial corporations.

## 7.5 FISIM – Consumer Loan Companies

**Issue:** Consumer loan companies differ from other financial corporations in that they do not accept deposits. Should a FISIM output be attributed to them?

**Pre-Revision Treatment:** FISIM was attributed to consumer loan companies, although the methodology was inadequate.

**Discussion Notes:** One may interpret the 1993 SNA as suggesting that consumer loan companies engage in financial intermediation even though they do not take deposits and are not loaning their own funds, as they "incur liabilities on their own account in order to mobilize funds" (paragraph 6.133). This is why the CSNA has attributed FISIM to them.

The old methodology overestimated the FISIM output of consumer loan companies. The general approach for the estimation of FISIM is to make it equal to the net interest received. FISIM output of consumer loan companies should be calculated in the same manner. However, since consumer loan companies do not accept deposits, FISIM is to

be attributed only to borrowers. Of that amount, the portion allocated to the household sector should be based on the ratio of the companies' consumer loans to their total loans. A further adjustment is needed for the fact that consumer loan companies get a higher return on consumer loans than other loans. The remainder of the FISIM output should be allocated to the business sector.

**Change:** The CSNA has continued to attribute FISIM to consumer loan companies, but has changed the methodology to reflect their net interest received.

## 7.6 FISIM – Bank of Canada

**Issue:** Should the CSNA adopt the 1993 SNA recommendation of treating the central bank as any other financial corporation?

**Pre-Revision Treatment:** The Bank of Canada has been classified as a financial corporation. However, its output has always been measured as the sum of expenses. One third of the output was allocated to the household sector, and the rest, to the government sector.

**Discussion Notes:** The treatment of the Bank of Canada in the CSNA is not in conformity with the recommendation of the 1993 SNA with respect to central banks (paragraph 6.132). However, since the Bank of Canada plays a very different role in the sector than other banks, a different treatment seems warranted. Its main functions are to formulate and implement monetary policy, issue and replace bank notes, manage the public debt and provide other banking services. It was felt that only its activities associated with financial intermediation could generate FISIM. However, on the basis of operating costs, this function was estimated to account for 9% of total expenses.

At Statistics Canada's request, the Inter-Secretariat Working Group on National Accounts (ISWGNA) deliberated and issued a clarification on the valuation of central bank output. In the January 1996 issue of *SNA News and Notes*, it states that where the approach recommended in the 1993 SNA "leads consistently to inappropriate results, output could... be measured at cost as for other non-market producers".

No documentation was found explaining the existing split of services provided by the Bank of Canada (one-third to the household sector and two-thirds to the government sector). The household sector's share was presumably based on the "cost of administering Canada Savings Bonds by the Bank of Canada". Since this cost is estimated to be quite small, it was recommended to stop allocating any Bank of Canada FISIM to the household sector.

**Change:** The CSNA continues to classify the Bank of Canada as a Government Business Enterprise (GBE) and to calculate its output as the sum of expenses. However, this output is now entirely allocated to the government sector.

## 7.7 Output of Insurance Industries

**Issue:** Should the CSNA implement the 1993 SNA recommendation of including in the output of insurance industries the investment income from their technical reserves?

**Pre-Revision Treatment:** The output of property and casualty insurance was deemed equal to premiums less claims. The output of life insurance companies was deemed equal to the operating expenses plus the dividends paid by the stock insurance companies.

**Discussion Notes:** In the 1993 SNA (Annex IV, paragraphs 14-18, 22-23), the output of property and casualty insurance is defined to include investment income from the technical reserve plus net premiums (premiums less claims). The technical reserve is the sum of prepaid premiums and reserves against future claims and other contingencies. The output of life insurance is defined as equal to premiums less claims, plus investment income from the technical reserve, less increase (plus decrease) in actuarial reserves. This formulation of output of insurance corporations approximates the sum of their administrative costs and the profits distributed to policyholders.

For both life and non-life insurance, total claims paid often exceed the premiums receivable. The income earned by insurance companies from prepaid insurance premiums and reserves against future claims affects the rate of premiums. An adequate measure of the service provided by insurance companies must take into account this income, as well as premiums and claims.

**Change:** The CSNA has now adopted the 1993 SNA recommendation of including the investment income from technical reserves in the output of insurance companies.



## 8. Input-Output – Classifications and Valuation

### 8.1 Industry Classification

**Issue:** Should the industry classification used in the Input-Output tables as well as the monthly and the provincial GDP by industry reflect the structure of the 3-digit classes of the 1980 SIC, both for the business and non-business sectors?

**Pre-Revision Treatment:** The industry classification employed in the CSNA was established at the time of the 1986 Historical Revision and was based on Statistics Canada's Standard Industrial Classification 1980 (1980 SIC) at the 3 and 4 digit levels. Several industries could not be mapped into the 3-digit classes of 1980 SIC. The non-business sector industries were presented only in final demand. Aggregation parameters were different for the business and the non-business sectors.

**Discussion Notes:** The industry classification employed in the CSNA has shortcomings. In several cases, industries could not be mapped into 3-digit 1980 SIC classes; several industries encompassed one or more 3-digit SIC classes as well as one or more four-digit classes of another 3-digit SIC class. This made it difficult to reconcile the estimates of wages and salaries by industry in the I-O tables with those based on the T-4, since the latter were available only at the 3-digit level. For some industries not covered by annual surveys, the estimates at the 3-digit level had to be split arbitrarily. Finally, the Industrial Monitor program of the Industrial Measures and Analysis Division required an industry classification better aligned with the 3-digit level of the 1980 SIC.

The issue of incorporating the draft 1997 North American Industry Classification Structure (NAICS) was examined in this context. It was concluded that the incorporation of the 1997 NAICS would require a major restructuring of the present industry classification employed in the CSNA, an undertaking that could not be completed given the time and resource constraints in the current Historical Revision. Therefore the 1997 NAICS was left aside and only the 1980 SIC was taken into consideration.

To remedy the problems in the present industry classification, several existing industry definitions needed to be changed and new industries to be created in the business sector at the worksheet level. The increase in the number of industries delineated in the CSNA did not, however, go far enough to allow a one to one correspondence between these industries and the 3-digit classes of the 1980 SIC, as required by the Industrial Monitor project, for the following reasons. (a) There were no output data for all industries at the 3-digit level, examples being agriculture and construction industries. (b) Input data were also lacking for several industries; for instance, in the case of wholesale and retail trade, there would be data on inputs and profits beginning only from 1993. (c) For other industries, data weaknesses did not allow further disaggregation, two examples being finance and personal services.

Further, the industries in the non-business sector were numbered differently than their counterpart industries in the business sector, which was a source of confusion. It was therefore recommended that such industries no longer be identified with a separate number, but instead be assigned the same number as their counterpart industries in the business sector in a separate work file. Under such an arrangement, value added could be presented for a whole industry or separately for the business and non-business components of that industry. This change should be carried back to 1961.

**Change:** The CSNA has revised the industry classification starting with the reference year 1981, both for the business and non-business sectors, to facilitate work on the Industrial Monitor and the reconciliation of estimates of wages and salaries. In addition, a work file has been created for the non-business sector industries so that the value added can be presented for a whole industry or separately for its business and non-business components, back to 1961.

## 8.2 Resource Royalties Industry

**Issue:** Should the 1993 SNA recommendation of treating resource royalties as an investment income rather than a service output be adopted, thus eliminating the Resource Royalties industry?

**Pre-Revision Treatment:** Resource royalties were treated as a service produced by an industry called 'Government royalties on natural resources'.

**Discussion Notes:** According to the 1993 SNA, revenues from the lease of land and the use of subsoil assets, called 'royalties' in the CSNA, are to be treated as property income, not as production income. This treatment does not require the creation of an industry producing the royalties and thus entails the elimination of the 'Royalties' industry in the Canadian Input-Output tables, as royalties will now be paid out of the surplus of the industries using the land and sub-soil assets. GDP will not change, but the value added in the using industries will increase with the reallocation of rent from intermediate consumption to primary input, with an identical offset in the output and the value added of 'Finance, insurance and real estate', to which the 'Royalties' industry belonged.

**Change:** In accordance with the 1993 SNA, the industry 'Government royalties on natural resources' is eliminated and so is the payment of such royalties out of the intermediate consumption of the industries using these assets.

## 8.3 Presentation of Non-Market Producers

**Issue:** Should the CSNA follow the 1993 SNA recommendation with respect to the presentation of non-market producers?



**Pre-Revision Treatment:** In the Canadian input-output tables, non-market producers were not shown either in the supply table or the use table. Instead, their inputs were directly allocated to final consumption.

**Discussion Notes:** According to the 1993 SNA, the output of non-market producers (such as establishments belonging to general government or non-profit institutions) must be shown in the Supply tables and their inputs, in the Use tables (paragraphs 15.62-67). It was recommended that the CSNA follow this presentation, but with one modification, namely that non-market producers be classified by sector rather than by industry, due to the lack of detailed basic statistics by industry. However, the value added of non-market producers would be disaggregated by industry.

**Change:** The 1993 SNA recommendation to present non-market producers in the Supply and Use tables has been accepted, but these producers are classified by sector, not by industry. However, their value added has been disaggregated by industry.

#### 8.4 Commodity Classification

**Issue:** Should the classification of goods and services (called 'commodities' in the Input-Output tables) employed in the CSNA be harmonized with the revised classifications for (a) industries in the CSNA and (b) services in the Balance of Payments? Should the revised commodity classification be carried back to 1986 to facilitate the deflation of the Input-output tables?

**Pre-Revision Treatment:** The commodity classification reflecting the Harmonized System/Standard Classification of Goods (HS/SCG) system was introduced in the reference year 1988.

**Discussion Notes:** When a new commodity classification reflecting the HS/SCG system was introduced in the Input-Output tables in 1988, some desirable changes could not be made on account of restrictions imposed by the medium level of commodity aggregation. Furthermore, because of the CSNA's revision policy, the new commodity classification could not be applied before 1988. Since the base year of the constant price series was 1986, this created problems and the deflation for subsequent years had to be carried out at the commodity link (L) level. There was also a need to align the commodity classification with that of the J series (the most detailed in the Income and Expenditure Accounts) so that the two systems could be harmonized without having to split commodities or the J series.

Since it was important for trade negotiations, a number of commodities would have to be split to accommodate as much as possible the new service categories in the Balance of Payments based on the IMF classification.

The commodity classification employed in the CSNA was reviewed in the light of the revision to the industry classification described above. Some commodity definitions would have to be changed to harmonize them with industries, especially where former



industries combining 3- and 4-digit classes were changed to 3-digits. Other commodities would need to be split to provide distinct outputs for some of the new industries created in both the non-business and business sectors. However, the commodity classification was already sufficiently detailed to allow the estimation of specific commodity outputs for the majority of new industries.

The commodity 'Government royalties on natural resources' would be eliminated, in line with the elimination of the industry 'Government royalties on natural resources', explained above.

As a counterpart to the non-business sector producers, new commodities would have to be created, such as services of welfare organizations, university services, defence services, and other government services.

In the case of household consumption, there were more categories in the Input-Output tables than in the Income and Expenditure Accounts (IEA), so that several of the former could be made to correspond to the latter. However, in a few cases, a single I-O category had to be split between two IEA categories. These problem cases could be resolved either by splitting Input-Output categories or combining those of the IEA.

**Change:** A revised commodity classification has been adopted and carried back to 1986. The commodity 'government royalties on natural resources' has been eliminated. The number of commodities at the most detailed level has been increased from 627 to 679.

## 8.5 Valuation of Imports and Exports

**Issue:** Should the 1993 SNA recommendation to value both exports and total imports f.o.b. at the border of the exporting country, and value detailed imports c.i.f. in the Input-Output tables be adopted?

**Pre-revision treatment:** The Canadian Input-output tables differed from the 1993 SNA with respect to the valuation of imports, both at the total level and the detailed level. The detailed imports by commodity were valued c.i.f. at the Canadian border inclusive of import duties. Total imports were recorded c.i.f., without customs duties. The valuation of exports was in conformity with the 1993 SNA.

**Discussion Notes:** The 1993 SNA recommendation results in two valuations of imports in the input-output tables, one for the total and the other for detailed imports by commodity. It also entails abandoning the Canadian practice of including import duties in the valuation of detailed imports. For these reasons, it was deemed preferable not to adopt it.

It should be noted that the inclusion of import duties in the detailed imports by commodity in the input-output tables was, and continues to be, offset by an adjustment

at the aggregate level such that the total value of imports of goods and services is the same as in the Balance of Payments.

With the Historical Revision, new information has become available on goods carried by Canadian carriers in the U.S. and *vice versa*. In the Canadian Balance of Payments, the transportation of Canadian imports by Canadian carriers in the U.S. is now recorded as an export of transportation services, and the transportation of Canadian exports by American carriers in Canada, as an import of transportation services. This practice does not conform to the recommendation of the 1993 SNA and the BPM-5, which is to record them as entries in the transportation account to offset the valuation of exports and imports of goods. The treatment adopted in the Canadian Input-output tables is the same as in the Balance of Payments.

**Change:** The 1993 SNA recommendation to value both exports and imports f.o.b. at the customs border of the exporting country has been adopted in the Balance of Payments. The Input-Output tables continue to record detailed imports c.i.f. including import duties, with an offset of these duties at the aggregate level, so that the total value of imports of goods and services is the same as in the Balance of Payments.

## 9. Deflation

### 9.1 Rebasing of GDP from 1986 to 1992 Prices

**Issue:** Should we rebase the constant price series of GDP from 1986 to 1992? How should we link the constant price series for the period prior to the base year?

**Pre-Revision Treatment:** In the CSNA, GDP and its components were measured at constant prices using fixed base volume indexes. Since 1961, the base year for constant price series has changed as follows:

1961 for the period from 1961 to 1971;  
 1971 for the period from 1971 to 1981;  
 1981 for the period from 1981 to 1986;  
 1986 for the period from 1986 to date.

Thus, since 1981, the base year has been changed in the CSNA about once every five years to reflect the evolution of prices in the economy. On this occasion, the series prior to the base year were not recalculated using the new base year prices; instead they were linked and growth rates originally calculated were maintained. The result was a chain of volume indexes linked only occasionally. In addition, annual and quarterly chain indexes of the growth of expenditure aggregates are presented in the Income and Expenditure Accounts, as a supplement to the fixed base indexes.

**Discussion Notes:** Given the continually changing economic environment, the structure of prices, over time, moves away from that of the base year. When the base year is far removed from the present, the rate of growth of the economy is likely somewhat overstated. This is because the goods and services registering the strongest real growth tend to be those experiencing the weakest increase in prices. Valued at the prices of a distant past, they make up a larger proportion of GDP and thus carry more weight in the growth of GDP than they would at the prices of a more recent time. As a result, the estimate of GDP at constant prices for the current period becomes less reliable. It was thus necessary to shift to a more recent one. The year 1992 was chosen, as it was the first 'normal' year after the introduction of the GST in Canada in 1991. It was also the latest year for which a final set of statistics was available. Finally, since the United States were also using 1992 as the base year of their National Accounts, the change would facilitate comparisons between the two countries.

It was suggested not to abandon the existing practice, that is, of linking each previous period while maintaining the growth rates calculated during that period. Chain linking the previous period every five years or so was deemed an acceptable departure of the 1993 SNA recommendation of chaining on a yearly basis (paragraph 16.73).



It was decided that the present practice of chaining value added by industry every five years was also adequate. However, the annual and quarterly chain indexes in the Income and Expenditure accounts should continue to be produced as supplementary information.

**Change:** The base year of the constant price series of GDP was changed from 1986 to 1992 prices. The pre-1992 period was linked while maintaining the earlier growth rates. As well, the annual and quarterly chain indexes continue to be produced as supplementary information in the Income and Expenditure Accounts.

## 9.2 Output of Non-Market Services – Education

**Issue:** Should output volume indicators be used to estimate the output of public education at constant prices?

**Pre-Revision Treatment:** Constant price labour inputs were estimated on the basis of an index of the number of full-time teachers employed, and constant price capital consumption allowances, by deflating the current price series with a price index of capital stock. Constant price output was obtained in the Input-Output tables as the sum of these two primary inputs, plus deflated intermediate inputs and deflated net indirect taxes.

**Discussion Notes:** The 1993 SNA recommends to produce volume indexes of output for education on the basis of the volume of education services delivered to households (paragraph 16.134).

One method of implementing this recommendation could be to use student enrolment broken down into relatively homogeneous categories and, for aggregation purposes, to apply a base year weight to each category or type of education - primary, secondary, special, college, university. University education should be further decomposed by field of study. The weight of each category could be equivalent to the relative cost of training, approximated by student fees plus government grants. The new method should be applied as far back as possible, given basic statistical sources. It was suggested that, in the future, the weights be updated more frequently and efforts be made to obtain similar sub-annual data.

**Change:** The 1993 SNA recommendation has been adopted, but only in the Input-Output tables, where output volume indicators based on student enrolment are now used to measure the output at constant prices of universities back to 1981, and of other public education back to 1986.

## 9.3 Quality Adjustment of the Volume of Wheat

**Issue:** Should the quality adjustment of the volume of wheat, taking into account variations in the grades of wheat produced, be identical throughout the CSNA?

**Pre-Revision Treatment:** The Income and Expenditure Accounts Division and the Industry Measures and Analysis Division adjusted the volume estimates for variation in the grades of the wheat crop, while the Input-Output Division (IOD) did not.

**Discussion Notes:** From 1981 to 1987, the Input-Output Division deflated wheat with a unit value index based on farm cash receipts. From 1988 on, this was replaced by an unweighted volume index of tonnes of wheat produced. The Division argued that the data on wheat grades were weak and that an adjustment was difficult to make. Representatives from other Divisions insisted that the adjustment was indispensable given the wide variation in the quality of wheat from one year to the next.

**Change:** An identical quality adjustment is now made to the volume of wheat throughout the CSNA.

## 10. Financial Flows and Balance Sheets

### 10.1 Seasonally Adjusted Financial Flow Accounts

**Issue:** Should the financial accounts be seasonally adjusted in order to further the integration of the CSNA quarterly accounts?

**Pre-Revision Treatment:** A subset of seasonally adjusted data (the Financial Market Summary Table) has been released at the same time as other CSNA components since the first quarter of 1987.

**Discussion Notes:** The Financial Flow Accounts are part of an integrated set of economic accounts. It is generally recognized that there is a need to remove the effects of seasonality from these accounts. The Income and Expenditure Accounts are seasonally adjusted. The financial accounts (the second set of accumulation accounts) extend the income and expenditure sector accounts by (i) yielding complete statements on sources and uses of funds and (ii) showing the financing of economic activity. The data on financial transactions have been analyzed for seasonality at different levels of aggregation (over instruments and sectors). The Financial Flow Accounts do embody seasonality and should therefore be seasonally adjusted and be made available in seasonally adjusted form.

It should be noted that many analysts of financial data use only the unadjusted data and link such data to interest rate and exchange rate fluctuations. Therefore, the Financial Flow Accounts should also continue to be available in unadjusted form.

**Change:** Seasonally adjusted Financial Flow Accounts are now produced at a level of sector aggregation sufficient to tie in with the seasonally adjusted data in the sector estimates of the Income and Expenditure Accounts.

### 10.2 Other Changes in Assets Account

**Issue:** Should the CSNA develop the 'Other Changes in Assets Account' (also called 'stock-flow reconciliation account') that explicitly links the balance sheet accounts and the flow accounts (capital and financial accounts) by recording changes in the value of assets and liabilities that do not result from transactions?

**Pre-Revision Treatment:** A stock/flow reconciliation account was produced in 1985 for the period 1984-85. This work followed the 1977 United Nations Provisional Guidelines for Balance Sheets and Reconciliation Accounts. The recommendations in the 1993 SNA are quite similar to the 1977 guidelines.

**Discussion Notes:** The 'Other Changes in Assets Account' (1993 SNA, Chapter 12) is concerned with the recording of changes in the value of assets, liabilities and net worth



between opening and closing balance sheets that do not result from the transactions recorded in the capital and financial accounts. This account has two components -- the 'revaluation account' and the 'other changes in the volume of assets account'.

**Change:** An 'Other changes in assets account' (stock-flow reconciliation account) based on the 1993 SNA, and thus explicitly integrating flows and stocks, is in the process of being developed.

### 10.3 Subsoil Assets

**Issue:** Should subsoil assets be included in the balance sheet account?

**Pre-Revision Treatment:** These assets were left out of in the balance sheet account.

**Discussion Notes:** The 1993 SNA states: "... natural assets must not only be owned but capable of bringing economic benefits to their owners, given the technology, scientific knowledge, economic infrastructure, available resources and set of relative prices prevailing on the dates to which the balance sheet relates... Thus, known deposits of minerals that are not commercially exploitable in the foreseeable future are not included in the balance sheets..." (paragraph 10.11).

Subsoil assets include reserves of oil, gas, coal and metallic and non-metallic minerals. Most countries have not been able to include such assets in their balance sheets because of (a) lack of physical data on the assets and (b) lack of agreed upon valuation rules. Yet, these assets constitute an important part of a nation's wealth and should not be ignored. At Statistics Canada, we have developed, as part of the Environment Satellite Account, both physical and monetary accounts for oil, gas, coal and other minerals. Estimates have been calculated according to three methods, namely (i) the net price method, (ii) the net present value method and (iii) the replacement cost method. The method of net present value is the one recommended by the 1993 SNA.

Changes in reserves of subsoil assets due to discovery or depletion are to be reflected in other changes in the volume of assets account. Changes in the monetary values due to price changes are to be recorded as holding gains (or losses) in the revaluation account.

**Change:** The 1993 SNA recommendation to include subsoil assets in the balance sheet account has been adopted. Those subsoil assets for which data are available are included in national wealth under 'non-produced assets' beginning in 1998. A breakdown of these assets by sector may also be available at a later date.

### 10.4 Timber

**Issue:** Should timber be included in the balance sheet account?

**Pre-Revision Treatment:** These assets were left out of in the balance sheet account.

**Discussion Notes:** The 1993 SNA recommendation on timber is similar as the one on subsoil assets. Standing timber is a renewable natural resource. It can be viewed either (i) as a produced asset, classified under the heading 'work in progress on cultivated assets' or (ii) as a tangible non-produced asset, classified under the heading 'non-cultivated biological resources' (paragraph 12.26.). Given the methodology employed to derive the estimates, no distinction could be made between timber that is produced and timber that is not. It was therefore decided to treat all timber as a tangible non-produced asset.

Both physical and monetary accounts have been calculated for timber. The value of timber (the present value of expected future rent, calculated as the selling price of timber less costs of bringing it to market) is the value of timberland, since the values of timber and land could not be separated.

Additions, reductions and changes in the value of timber are to be shown in the 'Other Changes in Assets Account' (the 'stock-flow reconciliation account' in the CSNA).

**Change:** The 1993 SNA recommendation to include timber in national wealth has been adopted. Timber will be shown on the national balance sheet beginning in 1998 as a non-produced asset, under the heading 'non-cultivated biological resources'. A breakdown of these assets by sector may also be available at a later date.

## 10.5 Monetization of Gold

**Issue:** Should the CSNA adopt the 1993 SNA recommendation of transforming the commodity gold into gold held as foreign exchange reserves by the monetary authorities, via reclassification of such gold in the Other Changes in the Volume of Assets Account?

**Pre-Revision Treatment:** Gold reserves of the monetary authorities (recorded in the Exchange Fund Account) were treated as financial assets on their balance sheet. When the Bank of Canada, on behalf of the Exchange Fund Account, increased gold reserves (in other words, 'monetized' gold) by transacting either with other monetary authorities or with suppliers of gold, an export of commodity gold was deemed to take place by the CSNA and the Balance of Payments, even when there was no export.

**Discussion Notes:** This treatment was required in order to bring the overall supply and disposition of commodity gold into balance. In practice, monetization activity gave rise to gold 'available for export' and this amount was classified as receipts. This reflected transfers of gold to the Exchange Fund Account, equivalent to an increase in Canada's external assets. Thus there was an artificial treatment of gold whenever it was monetized.

The 1993 SNA demystifies the treatment of gold: "Transactions in monetary gold consist of sales and purchase of gold among monetary authorities... Only gold that is held as a financial asset and as a component of foreign reserves is classified as monetary gold.



Therefore, except in limited institutional circumstances, gold can be a financial asset only for the central bank or central government. Purchases (sales) of monetary gold are recorded in the financial account of the domestic monetary authority as increases (decreases) in assets, and the counterparts are recorded as decreases (increases) in assets of the rest of the world. Transactions of other sectors in gold (including non-reserve gold held by the authorities and all gold held by financial institutions other than the central bank) are treated as acquisitions less disposals of valuables (if the sole purpose is to provide a store of wealth) and otherwise as final or intermediate consumption, and/or change in inventories." (paragraph 11.64)

"If authorities add to their holdings of monetary gold by acquiring commodity gold, i.e., newly mined gold or existing gold offered on the private market, or release monetary gold from their holdings for non-monetary purposes, i.e., for sale to private holders or users, they are deemed to have monetized or demonetized gold, respectively. When the authorities acquire gold, the transaction is recorded in the capital account as a positive entry under acquisition less disposals of valuables or change in inventories and counterpart entries are recorded in the accounts of the institutional units or the rest of the world supplying the gold... Monetization or demonetization itself does not give rise to entries in the financial accounts." (Paragraph 11.65)

"The creation or disappearance of monetary gold (referred to as monetization or demonetization of gold) is - unlike transactions in existing monetary gold - recorded in the other changes in volume account." (Paragraph 11.21).

Acquisition or disposition of official gold reserves can result from transactions between the Bank of Canada and other monetary authorities. However, the Bank of Canada also transacts with suppliers/demanders of commodity gold. Given the lack of information on gold as a store of value, it is assumed that all such transactors hold commodity gold as inventory. With the adoption of the 1993 SNA treatment, new reserve assets are created in the other changes in assets account with commodity gold flowing into this account as inventory and moving out as reserve gold.

**Change:** Non-monetary gold is now treated as a commodity, and transactions in non-monetary gold are recorded as inventory change. The transformation of gold into a financial asset by the monetary authorities (the so-called monetization of gold) is now recorded in the Other Changes in Assets Account. This treatment was extended back to 1968. No changes were made prior to that date. See also Item 10.2.

## 10.6 Leasing

**Issue:** What are the implications of the earlier decisions on financial leasing (Items 4.6 and 6.2), particularly of vehicles, for the financial and balance sheet accounts?

**Pre-Revision Treatment:** In the financial account and the balance sheet account, leases of machinery and equipment were generally treated as financial leases, with



leases receivable recorded on the books of the lessors and leases payable recorded on the books of the lessees.

For vehicle leases, the treatment was uneven, since the accounting of lease contracts was not consistent across the leasing branches of the vehicle manufacturers. Some companies accounted for such contracts as financial leases, showing a lease receivable on the balance sheet and interest income on the income statement. Others used operating lease accounting, showing fixed assets (the vehicles) on the balance sheet and rental receipts and depreciation on the income statement. As a result, liabilities in respect of vehicle leases were somewhat understated in the financial account and the balance sheet account, especially those of the household sector.

**Discussion Notes:** The 1993 SNA states: "A financial lease is a contract between lessor and lessee whereby the lessor purchases a good that is put at the disposal of the lessee and the lessee pays rentals that enable the lessor, over the period of the contract, to cover all, or virtually all, costs, including interest. Financial leases may be distinguished by the fact that all the risks and rewards of ownership are, *de facto*, transferred from the legal owner of the good (the lessor) to the user of the good (the lessee). The System's treatment of financial leasing is designed to move away from the legal arrangements to capture the economic reality of such arrangements, by treating goods under a financial lease as if they were purchased by the user." (Paragraph 13.23)

Because financial leasing and operating leasing are fundamentally different activities, the 1993 SNA attempts to assign them specific characteristics, while recognizing that it may be difficult to do so: "It is therefore essential to distinguish between the two types of leasing, even though financial arrangements may be devised which are hybrids of the two and which are consequently difficult to classify." (Paragraph 6.119)

It is evident that rules must be established in order to properly classify leasing, especially vehicle leasing, in the accounts. A major objective is to treat leasing as consistently as possible in all the accounts of the CSNA. Another important issue is the existence of factoring (contract sales) and securitization in the leasing market (see Item 10.7), a practice which argues for treating all lease contracts as financial assets under 'lease receivables'.

Machinery and equipment leases are treated as financial leases in the CSNA. The sector accounts generally allocate the leased capital to non-financial corporations (lessees) and the lease receivables as financial assets of financial corporations (lessors). In addition, a payable to the lessor is recorded as a liability of the lessee.

Vehicle leases to individuals are more complicated. One view is that they are nothing more than rentals, in other words, as operating leases. The other view is to treat them as conditional sale contracts under which the vehicle is being sold to the lessee, in other words as financial leases. Financial leases are essentially a form of financing under which a lessee acquires a property right concurrently with a liability.

Vehicle leases are characterized by the following:

- the lessee normally keeps the vehicle, and has exclusive use of it, during a significant portion of the asset's economic life;
- the lessee assumes the risk and responsibility for the vehicle;
- the lessee has the option to purchase the vehicle at the end of the lease for the pre-determined residual value.

In short, a lease that transfers the benefits and risks of ownership from the lessor to the lessee should be accounted for as a financial lease.

It was agreed that, in household consumption expenditure, vehicle leases greater than one year (almost all such leases) would be treated as financial leases. This implies that borrowing and debt in the form of leases should be allocated to the household sector. As a result, subsequent principal payments would be shown in the financial account along with changes to the corresponding liability in the balance sheet account. Specifically, there would be additional 'other loan' liabilities (lease payables) in the household sector, equal to the remaining principal payments plus the residual value. These liabilities would be matched by receivables on the books of the lessors. The lessors are found in the following sub-sectors in the financial and balance sheet accounts: (i) sales finance and consumer loan companies, (ii) other private financial institutions, (iii) non-financial private corporations and (iv) issuers of asset-backed securities.

**Change:** The 1993 SNA recommendation to treat vehicle leases to individuals as financial leases has been implemented. It has led to an increase in the borrowing and debt of the household sector as measured in the financial account and the balance sheet account. The treatment of vehicle leasing is now in line with that of leasing of machinery and equipment.

## 10.7 Asset-backed Securities

**Issue:** Asset-backed securities result from the pooling of various types of loan assets and the corresponding issue of a 'security', whose income is derived from the assets. In most cases, the securitized assets are removed from lenders' balance sheets. Should this off-balance sheet activity (i.e., asset-backed securities, and the resulting securitized assets) be included in the financial and balance sheet accounts, as recommended in the 1993 SNA? If so, how?

**Pre-Revision Treatment:** The treatment of this activity was partial and inconsistent. The focus was on accounting for securitized assets (in order not to understate credit market debt and borrowing), rather than on the security itself. For example, National Housing Act mortgage-backed securities (NHA-MBS) were treated not as securities, but as mortgage assets of the household sector. Other asset-backed securities were accounted for in a hit and miss fashion. Unanticipated drops in loan assets were verified and, if survey respondents indicated securitization activity, the appropriate amounts

were added back to the assets of the lenders. However, the securities themselves were ignored.

**Discussion Notes:** The 1993 SNA states: "New negotiable securities are often issued backed by existing assets such as loans, mortgages, credit card debt, or other assets (including accounts receivable). This re-packaging of assets is often referred to as securitization. The creation of the new assets gives rise to entries in the financial account and the new assets should be classified as securities other than shares." (Paragraph 11.75)

First, asset-backed security issues must be recorded as liabilities of the issuer, as they are assets of other institutional sectors. Second, the securitized assets must also be integrated into the financial accounts, in order to correctly measure credit market debt, both mortgage and non-mortgage.

Common types of instruments securitized are credit card receivables, vehicle loans, lease receivables, commercial loans and residential mortgages (conventional and insured under the NHA).

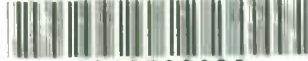
Since the process of securitization involves the creation of a special purpose trust that (i) holds securitized assets in trust and (ii) issues asset-backed securities, a new institutional sector must be established. Statistics Canada has recently implemented a survey of such trusts.

**Change:** The recommendation of the 1993 SNA to include asset-backed securities in the financial account and the balance sheet account has been adopted. They are recorded under 'securities other than shares'. Most of the activity is shown in a new institutional sector called 'Issuers of Asset-backed Securities', which holds most of the securitized assets.





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